

NDLAMBE: ELECTRICITY TARIFF IMPLEMENTATION PLAN – 2024/2025

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APPROVAL

Relevant Department: Directorate Electrotechnical Services

	Designation	Name	Signature.
Compiled:	Consultant	Hendrik Barnard	
Recommended:	Finance	Diane May	
Approved:	MM		

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1. INTRODUCTION.

Ndlambe Municipality (Ndlambe) completed its cost of supply and tariff study. The study was approved by the Council and NERSA and is now being implemented. This document contains the implementation plan which stipulates all practical issues relating to how the new tariffs and capacity limits will be rolled out:

- The changing of capacity limits in prepayment meters.
- The changing of capacity limits in conventional meters.
- The coding of tariffs in the billing and vending systems.
- The recovery of the fixed charges (Basic and capacity charges).
- Integration between the implementation of the capacity limits and the TID.

2. BACKGROUND

It is important to understand the tariff changes that are being made:

- Indigent tariffs:
 - Indigent: 20 Amp capacity limit, 50 kWh/m of FBE, IBT energy.
- Domestic = 20 Amp tariff single phase.
 - Capacity set at 20 Amps, IBT energy.
- Domestic >20 Amp tariff single phase.
 - A Basic charge to reflect fixed metering, billing, revenue collection and consumer services costs.
 - A capacity charge based on the installed / limited capacity of the consumer.
 - Single phase 30 Amp in steps of 10 Amps up to 80 amps.
 - Three phase 20 Amps in steps of 10 Amps up to 150 Amps.
 - An energy charge that covers the full energy cost, losses and surplus mark-up.
- Small General tariff single phase.
 - A Basic charge to reflect fixed metering, billing, revenue collection and consumer services costs.

- A capacity charge based on the installed / limited capacity of the consumer.
 - Single phase 20 Amp in steps of 10 Amps up to 80 amps.
 - Three phase 20 Amps in steps of 10 Amps up to 100 Amps.
- An energy charge that covers the full energy cost, losses and surplus mark-up.
- All bulk consumers ($\geq 3 \times 100$ Amp) should be charged on a TOU tariff like the Eskom Megaflex tariff:
 - Basic charge.
 - Access charge based on the
 - For LV consumers: installed capacity (circuit breaker size)
 - MV consumers: Notified demand or highest maximum demand incurred.
 - Maximum demand charge based on **monthly** highest maximum during Peak and Standard Periods only.
 - Energy charges for:
 - High Demand (June, July and August) and Low demand (all other months)
 - Peak, Standard and Off-peak (See diagram below)
 - Reactive energy charge based on kvarh in excess of 30% of kWh during every half hour period during all Peak and Standard period for both seasons.
 - Public holidays treated the same way as Eskom.
 - Two tariffs namely:
 - Supplies at LV
 - Supplies at MV
- TOU tariff for small Domestic / Commercial consumers with Similar structure to Megaflex but no demand or reactive energy charges. All SSEG consumers must be on these tariffs and be registered as SSEG consumers.

Applicable to all consumers:

- The new phased in tariff rates (basic, capacity, energy, TOU, etc) will be applied as from 1 July 2024.
- The actual changing of capacity and all the rules relating to that are set out below.

3. SMALL CONSUMER IMPLEMENTATION PLAN.

It is proposed that the new tariffs be implemented as follows:

For small Prepayment consumers:

The selection of capacity will be done as follows:

- All indigents will go onto 20 Amp single phase.
- All other consumers will be given the choice of selecting their capacity. The problem is that we are too late as the tariffs have to change as from 1 July 2024. The following process will thus be followed:
- The capacity will be set based on the historic consumption patterns as follows:
 - < 400 kWh/m – 20 Amp single phase
 - $\geq 400, < 600$ kWh/m – 30 Amp single phase
 - $\geq 600, < 800$ kWh/m – 40 Amp single phase
 - $\geq 800, < 1000$ kWh/m – 50 Amp single phase
 - $\geq 1000, < 1200$ kWh/m – 60 Amp single phase
 - ≥ 1200 – Extra 200 kWh/m add 10 Amp per phase
- Consumers can still select the capacity they want until 25 July 2024 so that the fixed charges can be levied in time.

To change the actual capacity will be done as follows:

- A contractor will be appointed to do the actual change of the capacity in the pre-payment meters.
- The process to be followed is as follows:
 - The contractor identifies the area to be changed.
 - They obtain the relevant tokens for each of the consumers in that area.

- They then visit each of the premises and do the following:
 - Communicate with the consumer about the capacity change.
 - Enter the change capacity token in the meter.
 - Take a photo of the meter showing the new capacity.
 - Have the consumer sign acceptance of the new capacity.
- This obviously has implications:
 - It will take time to get to all the pre-payment consumers to check / change the capacity.
 - This will obviously give consumers time to manage their demand within the selected capacity.
 - Customers will have a bigger capacity than what they pay for until such time as the actual capacity is changed.

For small conventional meter consumers:

- All consumers will be set at the capacity they select or as per council decision based on historic consumption in the same way as PP.
- Conventional consumers may not select less than 30 Amps. If consumers want a 20 Amp supply they need to apply for a pre-payment supply and pay the relevant fees.
- Consumers will be sent a letter and be informed of the changed tariffs and the process to be followed to change the capacity.
- Conventional consumers need to change their capacity of the circuit breaker in their Distribution Board by an electrician.
- A certificate of compliance (COC) together with an application form the new capacity then need to be submitted to Ndlambe.
- This application will then be processed, and the capacity charge be set according to the new capacity.
- These consumers will be given until November 2024 to change their capacity to what they want.
- **By 1 December 2024 those consumers who have not changed their capacity, the tariff will be set as per the actual capacity on the premises.**
- In the case of consumers reducing their capacity, Ndlambe can in time change the capacity of their breakers in the meter boxes to match the consumer capacity but with slower trip curve.

Recovery of fixed charge for prepayment consumers.

The following in this respect:

- The fixed (basic and capacity) charges will be recovered through the billing system and not through the vending system.
- In cases where consumers currently don't get bills, they would need to register and will receive a bill containing the basic and capacity charge.

Communications between Ndlambe and venders.

It is obviously going to be important that the integration between the billing and vending systems are as integrated as possible. The following is proposed in this respect:

- Ndlambe send a flat file to Vender indicating which tariffs each consumer should be on. This will be done based on:
 - the historic consumption considering the monthly average but also the highest purchases in any one month.
 - The decision made by consumers.
- Vender then place consumers on the correct tariffs.
- The change capacity tokens will only be generated when contractors do capacity setting in the particular area.
- Ndlambe obviously needs to make the same changes in the billing system as the fixed charges are recovered through the billing system.
- The recovery of arrears through the vending system continues as per current arrangement.

Future changes.

If the capacity is to be changed due to application by a consumer after the initial selection has been done the following needs to be done:

- The consumer make application to change capacity.
- Every consumer has one opportunity to select the desired capacity.
- For all subsequent capacity changes a call out fee will be charged.
- The application needs to be made at the Ndlambe municipal offices and be approved by Ndlambe and notification be sent to Vender in case of pre-payment.
- For conventional consumers:
 - Where the capacity is less than to the current installed capacity, a COC proving that the consumer circuit breaker has been changed needs to be provided and the normal municipal process will follow.
 - If the selected capacity is the same as the current installed capacity, no further work is required.
 - If the selected capacity exceeds the current installed capacity the normal increase capacity process needs to be followed with the required payments.
 - The tariff needs to be changed in the billing system.
 - Remember by the latest November 2024 the tariff, capacity, will be set as per the installed capacity.
- For prepayment:
 - Capacity increase.
 - In the case of a capacity increase, up to the current network installed capacity (mostly 60 Amp per phase but in some cases 30 amps), the tariff be changes in both systems and a capacity change token be issued by Vender and token be entered in the meter.
 - In cases where the requested capacity exceeds the current installed capacity, the normal increase capacity process needs to be followed with the required payments. Only once the required terms have been met, will Vender be instructed to change the tariff and capacity and billing will do the same.
 - For capacity upgrade Vender can issue the capacity change token to the consumer who need to enter it in the meter. Alternatively, Vender can send out their contractors to do it.
 - Capacity decrease.
 - For a capacity down grade the capacity change token be generated but the token needs to be entered by a contractor.
 - These visits is normally not covered by vending contracts and thus need to be covered by way of an addendum or new contract.

4. TIME OF USE (TOU) CONSUMER IMPLEMENTATION PLAN.

Currently there is one TOU tariff for all Bulk consumers.

Various changes are going to be applied. The following TOU tariffs will be available:

- In future there will be three TOU tariffs namely:
 - One for supplies < 3 x 100 amps at LV compulsory for SSEG consumers.
 - One for supplies ≥ x 100 Amps at LV.
 - One for supplies at MV.
- All Customers need to be placed on the correct tariff as from 1 July 2024.

All Bulk consumers ≥ 3 x 100 Amps are already on TOU. That must also apply to all internal, municipal, Bulk points of supply. The structure of the new TOU tariffs is similar the same for as the current TOU tariffs. The following in respect of current TOU tariffs.

- A structure like Eskom Megaflex but.
 - Reactive energy charge applies for the whole year.

Small TOU tariffs. This tariff is compulsory for all small consumers who install renewable power (PV, wind, etc) at their premises.

- This tariff applies to supplies < 3 x 100 Amps.

- This tariff has a similar structure to Megaflex but:
 - No maximum demand charge.
 - No reactive energy charge.
- The capacity charge will be based on the actual installed capacity of the consumer in Amps.
- If the consumer wants to change the capacity, they need to follow the same process as another consumer but keeping in mind that the renewable power system capacity (infeed into the network) may not exceed 50% of installed capacity. The tariff capacity will thus be a minimum of **40 Amp single phase** for Domestic consumers.

Access demands.

- Applications for reduction in access demand will have to be motivated based on actual installation situation and will be subject to approval by the head of electricity.
- In cases where consumers want certainty of increasing their maximum demand, they must notify such demand in which case such demand level will be used as Access demand and the capacity be reserved for that consumer.
- When consumers increase their access demand, they will be charged additional Development Charges (DC's) in respect of the increase in required demand from the existing to the new level. Consumers need to prove that they have paid DCs up to a particular capacity. In such cases no DCs will apply up to the capacity for which they originally paid DCs for.
- Consumers will be informed of the new approach and be offered the opportunity to notify a demand higher than their previous highest maximum.
- A letter needs to be sent to consumers in this respect.

5. SSEG PLAN.

The application of tariffs for SSEG consumers is a controversial issue:

- Many consumers have installed renewable power generators at their premises without any notification to Ndlambe.

The following strategy is thus proposed in this respect:

- Ndlambe will apply the NRS standards in this respect but not in respect of capacity of the SSEG system not exceeding 50% instead of 25% of the installed capacity.
- All SSEG consumers will have to follow the complete application and registration process which include payment and installation of a 4 quadrant 4 wire TOU meter with modem.
- This will allow consumers to feed-into the network and be compensated.
- When the owner of a premises changes, reregistration will be required.
- Any consumer who intends to go off-grid, in other words not to be connected to the network, will be subject to an availability charge.
- The municipality considers appointing an external service provider to manage the downloading of load profile and billing data from the meter and to the billing system to automate this process.

6. OTHER ISSUES.

The following issues have been raised and are being addressed in the various policies / guidelines:

DC charges for SSEG / wheeling customers.

- DC charges will only be levied when the demand, forward or reverse, increases on the network as a result of such transaction.
- No DC charges will be otherwise charged for renewable generation capacity.
- Any network expansion required will be for the generator's account.
- If an extended network is required to get capacity to the Ndlambe grid, which Ndlambe has to take over, a special maintenance fee would need to be considered on that section of network.

Charge for demand: forwards / backward

- Maximum demand and access charges will apply as follows:
 - MV consumers. Where consumers generate more kVA in reverse direction than in forward direction, this reverse demand will not apply but the demand / access charge will remain at that for the forward direction.
 - LV consumer. The maximum demand and access charges will be based on the highest of the Maximum demand in both directions. If this is a problem the consumer be given the option to convert to a MV supply. This is because of the problem of feed-in energy back through the transformers.

Upgrade / downgrade in Notified demands:

- For downgrade –
 - The consumer makes application
 - Head of electricity assess and approve.
 - Consumer is quoted the relevant fee.
 - The consumer must then have an electrician change its circuit breaker and attach a copy of the COC with the quoted fee.
 - Once this has been done and payment been made, new tariff be applied as from of next month
 - The Ndlambe supply circuit breaker only be changed when electricity staff can schedule.
- For upgrade:
 - The consumer makes application.
 - Electricity investigate and quote applicable upgrade costs plus DC charges.
 - The consumer be quoted the full increased capacity DC charges.
 - If consumer had previously paid DC charges at a higher capacity than current capacity, the consumer needs to provide proof of such payment.
 - In such case DCs only apply in respect of capacity exceeding approved and paid DCs capacity.
