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## 1. Why is Eskom implementing the prepaid SMART metering system?

Eskom aims to migrate all its customers from conventional metering to smart prepaid metering, as the company continues to experience an increase in overdue debt across all market sectors, non-technical energy losses (illegal connections) and an imbalance of supply and demand (overloading of the system).

To make it easier, simpler and more reliable for consumers to monitor and manage their electricity expenditure and consumption whilst assisting Eskom to improve revenue collection and achieve more efficient load management, thereby reducing the risk of unexpected power cuts and the inconvenience this causes to consumers.

# 2. What are the advantages of converting to a pre-paid meter? Or how will a smart meter help me manage my electricity expenses?

Electricity consumers will no longer receive unexpected bills and will be able to budget for and manage their consumption themselves according to amount of units bought. In the future they will be able to view their consumption pattern and adjust their usage to cheaper tariff periods should this become available.

A prepaid electricity meter has a read out unit called the Customer Interface Unit (CIU) which displays units as well as level of power consumption. This allows the customer to better monitor how much electricity they are using and therefore budget better every month. If the customer often gets electricity bills at the month that are surprisingly higher than you ever thought then switching to prepaid will help them monitor and use their electricity more efficiently and sparingly.

### 3. What information will a smart meter give the customer?

Through the consumer interface unit that is to be installed with each smart meter each electricity consumer will be able to monitor their rate of electricity consumption, the amount of units available, the date and time and receive alerts when the number of remaining units is low.

#### 4. What's the difference between a conventional meter and a smart meter?

A conventional meter provides a passive display of electricity consumption and which can only be read manually by a meter reader or the relevant electricity consumer.

A smart meter provides two way communication between the smart meter itself and Eskom, its service providers and the electricity and pre-payment networks thereby allowing remote meter reading, improved energy management, and communication to the electricity consumer by means of the associated consumer interface unit.

#### 5. How do smart meters work?

Smart meters make it possible to undertake meter readings and to monitor service connections/disconnections, service interruptions, meter tampering remotely by means of two communications between Eskom and its service providers and each smart meter without human intervention.

An electricity token (voucher) is purchased from a vending point or system and entered into the meter. If the token is valid the meter accepts the token and adds the credit (amount of units on the token (kWh) to the credit, which is currently in the meter. The customer is then free to consume electricity until the credit recorded in the meter runs out, at which time the meter interrupts the electricity supply.

#### 6. How reliable is smart meter information?

Smart meters are reliable and accurate and information to and from the meter is constantly being updated via communications links.

### 7. Why should I trust the accuracy of smart prepaid meters?

Smart meters are computer-controlled state-of-the-art electronic devices. The meters are robustly tested and calibrated according to required standards. Smart meters have been used in deployments elsewhere around the world and the technology is well proven.

# 8. Who will pay for the new smart prepaid meters and when will the new meters become operational?

Eskom will be installing the new prepayment at no cost to customers. The smart meters will be operational as soon as they are installed and tested.

# 9. For those who already have prepaid meters or smart post-paid meters installed by Eskom what will happen to the meters that have already been installed?

Eskom will, at its own cost, replace all current meters whether smart or prepaid. There is no cost implication for the customer.

### 10. If existing meters are converted to pre-paid, who will pay for the conversion?

All existing meters will be replaced with new smart prepaid meters and a conversion is therefore not envisaged.

11.Do installers have any form of identity that customers can recognise them with?

Yes. All installers will carry identity cards.

12. Can the smart post-paid meter the customer bought interface with Eskom's new smart prepaid meter?

All current meters will be replaced by a new smart prepaid meter at Eskom's cost.

13. Many Large Power Users (LPU) have smart post-paid meters already. Will Eskom's smart prepaid meters be able to interface with the existing internal systems and utilise the existing installations of each LPU?

Yes, we will engage with the LPUs to ensure that the new smart prepaid meters interface with their existing internal systems and utilise existing installations.

### 14. Where can the customer buy electricity?

Through a range of different vending points throughout Eskom including banks, retail shops, Eskom buildings, spazas, kiosks, and ATMs. In addition the system will utilise electronic vending systems to facilitate 24/7 purchase via EFT, the Internet and by means of smart phones.

15. Will the cost of electricity stay the same once the new smart prepaid meters have been installed?

Yes, the prevailing electricity tariff will remain the same for both new and old meters.

# 16.I understand different rates apply at different times of the day. What are these rates?

At present the electricity tariffs are the same irrespective of the time of consumption. Should new "time of use" tariffs become available Eskom will communicate this information to customers as applicable.

## 17. Why can't Eskom use electricity deposit to offset the first month of prepayments so that I don't have to make a double payment that month?

The purpose of the existing deposit is to provide security to Eskom for the performance of the electricity consumer's obligations which include payment of existing amounts due to Eskom as well as security for damage which may be caused to Eskom's electricity infrastructure, meters and installations. Although it is likely that existing deposits will be retained by Eskom for these purposes Eskom is evaluating all options to ensure a smooth transition for electricity consumers.

# 18. Can't Eskom charge a different tariff or offer a discount in the first month of pre-payments to soften the blow of a double payment?

Eskom will give electricity consumers time to budget for the transition by allowing electricity consumers a longer period to pay amounts owed in respect of electricity consumed before the activation of their smart prepaid meters.

# 19. How will the customer know that the double payment in the cut-over month will not disappear?

All payments will be accounted for and reconciled in the normal way and in accordance with applicable law.

20. Common understanding is that, converting to pre-payment involves more than a double payment in the first month because at the moment the customer is billed for power they've used up to 45 days later, and make the payment about 30 days after getting the invoice. Is this right?

All payments due to Eskom should be effected timeously and electricity consumers should not be paying late as this has a detrimental impact upon the functioning of Eskom and other consumers. Eskom will give electricity consumers time to budget for the transition. Once the transition is made, payment for usage becomes much simpler and more manageable.

## 21. Who will get the interest that accrues on the advance payment?

Although the period between each purchase of prepaid electricity and the time of its consumption will vary greatly and may in some instance be very brief, to the extent that interest accrues this will accrue to Eskom and will thus ultimately benefit electricity consumers.

### 22. Is there going to be a new tariff structure?

No the prevailing tariff structure will remain and will be revised in the normal course, as is the case every year, following approval by both Eskom and NERSA.

# 23. Will there be bands of tariffs that if client buys a1, 2, 3 – 5 months in advance worth of credit, will there be benefits or not?

Although this may be considered in due course any revisions to the existing electricity tariff structure will require the approval of Eskom and NERSA.

## 24. What is the smart meter project costing Eskom?

Eskom has allowed for the cost of the project to be incurred over an extended period of time and has determined that notwithstanding such cost there will be a net positive improvement in Eskom's revenue and cash flow position which will benefit all ratepayers significantly.

# 25. Shouldn't Eskom focus first on preventing theft before investing a lot of money in new meters?

The new smart prepaid meters are expected to reduce energy theft dramatically through built-in smart features like tampering detection.

# 26. What happens if I underestimate my electricity needs? Will I get advance notice before my electricity supply is cut off?

Yes, the system will warn electricity consumers by sending messages to the display unit in your home or office in good time to purchase additional units.

## 27. Is there a risk that I could be cut off by mistake?

Smart prepaid meters are accurate and the communication between the vending system and each smart prepaid meter is very quick and almost real-time. In addition, a dedicated call centre will be established and response teams will be dispatched to address any metering related faults should these occur.

### 28. Will smart prepaid meters solve existing problems with reliability of supply?

Although supply interruptions may be caused by many factors and external events, the use of smart prepaid meters will provide better information regarding electricity usage by

electricity consumers and this will enable better planning and load management which in turn is expected to contribute to more reliable supply and a reduction in unexpected load shedding. Information is retrieved from meters on a continuous basis so accurate load profiling can be carried out.

# 29. Will the introduction of smart prepaid meters have any effect on the quality of electricity supply?

See previous answer. In addition, the enhanced security of revenue which smart prepaid meters will provide to Eskom will enable it to further invest in the electricity network and thus improve electricity supply.

## 30. Who do I contact if something goes wrong with my smart prepaid meter?

Please Contact Eskom Contact Centre Number 08600 37566

### 31. What smart meter service level commitments can Eskom give to customers?

Eskom is obliged to comply with all applicable provisions of electricity legislation as regards the supply of electricity services and it will continue to comply with these obligations in relation to all electricity consumers.

### 32. Will smart prepaid meters result in improved customer service?

Yes as gueries relating to electricity billing will be eliminated.

### 33. Why is Eskom introducing smart prepaid meters?

To improve security of revenue for Eskom and to empower electricity consumers to manage their electricity expenditure and consumption better.

# 34. Will there be a pilot first to identify and remedy any glitches? If so, where will the pilot be?

Whilst the concepts of prepaid electricity and smart metering are not new to Eskom the installation of new smart prepaid meters will be undertaken on a gradual and phased in

basis and all meters will be tested to ensure that they are functioning once they have been installed.

# 35. For how long will the power supply be disrupted when the new meter is installed?

Eskom will use all reasonable efforts to minimise the duration and extent of any supply disruptions arising from the installation process. The installation process could be as brief as 30 minutes per house.

## 36. How does Eskom deal with illegal connections?

Illegal connections are removed on a daily basis. Smart prepaid meters are expected to make detection easier.

# 37. How does Eskom assist pensioners and the unemployed residents to buy electricity?

Indigent consumers are required to register with Eskom and when approved they qualify for free kWh per month. This will not be affected by the introduction of smart prepaid meters.

# 38.Do indigent consumers have any limits in relation to their ability to buy electricity?

No.

## 39. Are there laws for electricity?

Yes – these are publicly available and published on NERSA & Eskom's websites.

## 40. Are smart prepaid meters easy to tamper with?

No the smart prepaid meters have very sensitive tamper alarms and communicate irregularities directly to Eskom revenue protection unit.

# 41.It is difficult to load a conventional prepaid meter when the credit is zero on the current meters, what is Eskom doing to address this matter?

The loading of units will be done automatically by the vending system when the electricity consumer purchases units.

## 42. Whose responsibility is it to pay for a cable when stolen?

Eskom will replace a cable when the customer has reported the incident to the police.

### 43. Will electricity be cut-off if the installation of smart prepaid meters is delayed?

No. However, electricity supply to a given electricity consumer will be interrupted temporarily during the installation of a smart prepaid meter.

### 44. Who will do the maintenance of the equipment (smart prepaid meter)?

Eskom will procure the carrying out of the required maintenance.

# 45. Can separate arrangements be made in relation to existing arrear electricity accounts?

Yes, electricity consumers can approach Eskom to make arrangements in accordance with Eskom's debt collection and credit control policies and requirements.

## 46. Why do certain vendors charge more than the prescribed price?

They must be reported as this is illegal.

# 47. Are there plans to make sure that customers do not travel long distances to buy electricity coupons?

It will be no longer necessary to buy a coupon as electricity units will be loaded automatically by the vending system onto the smart prepaid meter. Eskom is making every effort to ensure that it is easy and convenient for electricity consumers to purchase electricity units through a broad range of channels and payment methods some of which, such as the use of smart phones, will largely eliminate the need for travel.

## 48. Will Eskom install prepaid smart meters for backroom tenants?

No, the by-law states one connection point per stand.

# 49. How long does the installation process take once the installers are at my house?

The time varies depending on the setup of the existing installation. If the meter is already installed outside the customer's premises, and the kiosk is in good condition, it could take 30 minutes to do a meter replacement. If the installation has to be modified, it could take longer

# 50. Will the homeowners association in residential complexes/estates allow the installation of pre-paid system?

The metering technology to be installed for customers is the prerogative of Eskom in cases where the customer is directly supplied by Eskom.

#### 51. How much will I save?

The savings largely depends on how a customer uses electricity; it has nothing to do with the type of meter installed. The advantage with a prepaid meter is that customers can see in real time how much they are consuming.

### 52. Won't the pre-paid inconvenience customers?

No. South Africa has about 10 Million prepaid meters installed for customers from different LSM levels, none of them have reported being inconvenienced.

#### 53. Will this meter ever malfunction?

Meters should not malfunction as they go through stringent tests before they are installed. If this happens, the meter should be reported to Eskom immediately

### 54. How will customers know if the meter is faulty & how can they get it repaired?

There are various ways in which a customer will know that the meter is faulty depending on the fault e.g. Customer Interface Unit (CIU) will display an Error, CIU is blank, keypad not responding, etc. All faulty meters must be reported to Eskom who will arrange for the repairs to be carried out.

## 55. To fix the meter will it be cost that customers need to pay?

Meters are the property of Eskom. Faulty meters will be repaired by Eskom at no cost to the customer.

### 56. Will companies/factories also be able to use prepaid meters?

Yes. Eskom is working on the solution for these types of customers.

# 57. How is smart pre-paid different from the split metering technology, Eskom is rolling-out in Soweto?

Smart pre-paid meters are more advanced than the basic split meters that have been rolled out in Soweto. Eskom's strategy is to roll out these smart pre-paid meters everywhere in future.