Eskom Tariffs for the agriculture sector

Fact Sheet

Introduction

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Eskom has several electricity tariffs, which provide from the largest to the smallest of customer needs across all sectors in the country.

The electricity requirements for each farmer are unique in the sense of consumption, demand and usage profile. These unique energy requirements necessitate the selection of the optimum tariff to meet the customer's needs.

The applicable tariffs for the agriculture sector can be divided into two major groups (1) time-of-use tariff, and (2) fixed energy charge tariff.

The purpose of this document is to direct a customer to the applicable tariff which will suit his/her needs.

Definitions

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Eskom uses standard definitions, but for the ease of reference, a short description is also provided.

Word	Eskom definition	Description
Consumption		The energy used (usage), measured in kilowatt-hour (kWh).
kVA demand		The amount of power required at a specific time measured in kilovolt-Amp (kVA). It can be described as the amount of electricity required to drive a certain product or process.
Usage profile		It is the amount of electricity required at certain times. It can be plotted on a graph with the kVA demand on the one axis and time of day on the other axis. Due to repeated daily operations, the daily profiles are quite similar. A usage profile can be a daily, weekly, monthly or even an annual profile.

Time-of-use (TOU) tariff	A tariff with energy charges that change during different TOU periods and seasons.	As demand for electricity throughout the country increases it becomes more expensive per unit of electricity (kWh) to generate electricity. This generation cost is reflected in a tariff where the customer can benefit from the lower energy tariff during the lower demand period. The tariff allows for peak (high demand – high unit cost), standard (medium demand – medium unit cost) and off peak (low demand – low unit cost) periods. They are generally referred to the different time zones as red (peak time), yellow (standard) and green (off-peak) zones. The time-of-use tariff contains a seasonal component as well (see seasonal tariff below).
TOU Seasonal component		The tariff differentiates between the high demand season (June to August) when the demand is generally higher, due to the additional loads such as the heating of houses and offices than the low demand season. During the high demand season, the tariff is substantially higher than the low demand season, because it is more expensive for Eskom to generate power in the winter months than at other times of the year.
Fixed energy charge tariff		The unit cost rate of the energy is not dependent on the time of the day or the season of the year it is used. The rate is the same all year round as it averages out the seasonal generation costs.
Rural	Areas classified as rural by Eskom for the purposes of tariff design and classification.	Areas outside the town/city which is sparsely populated and generally supplied with electricity by Eskom.
Notified maximum demand (NMD)	The contracted maximum demand notified in writing by the customer and accepted by Eskom in accordance with point of delivery (POD).	As more electrical driven equipment is switched on, the demand for electricity will increase to the level where all the equipment that needs to run simultaneously are switched on. This demand is called the maximum demand required and in accordance with Eskom agreement, Eskom should be informed of the expected maximum demand which will be required at the point of delivery (POD) and therefore called notified maximum demand. The customers do have the right to inform Eskom of the maximum demand they expect to use up to the transformer size, which will be used for billing purposes. If the NMD is exceeded, the actual reading will be used as the new NMD.
Kilovolt (kV)		Volt is the derived unit for electrical potential. An electric potential at 1 000 Volt = 1 kV. The electric potential at a single phase household plug point should vary between 220V and 240V, at a three phase supply point such as larger electrical motors the voltage should vary between 380V and 400V. The overhead supply network feeding rural areas would be either 11 kV or 22 kV. Low voltage is the nominal voltage up to and including 1 kV, medium voltage is greater than 1 kV and less than 44 kV while high voltage is equal or greater than 44 kV up to and including 132 kV.

Time of use tariff

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Ruraflex is a time-of-use electricity (TOU) tariff for rural customers with dual and three-phase supplies with a notified maximum demand (NMD) from 16 kVA with a supply voltage ≤ 22 kV (or 33 kV were designated by Eskom as rural).

During peak times as indicated above, the energy tariff is substantially higher than the standard time tariff. Off-peak tariffs are very reasonable and should be maximised. During the high demand season (which is the three months of the year June, July and August when the system demand peaks), the cost of energy is higher than the low demand season.

Time-of-use periods for Ruraflex

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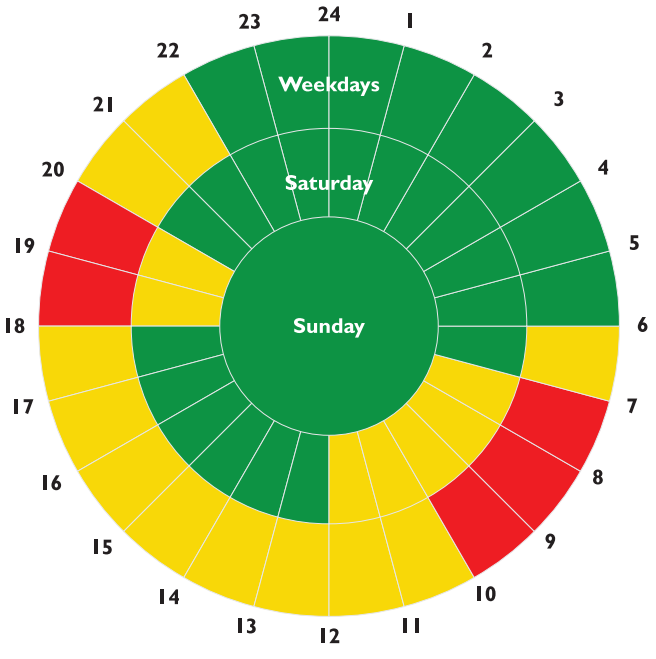
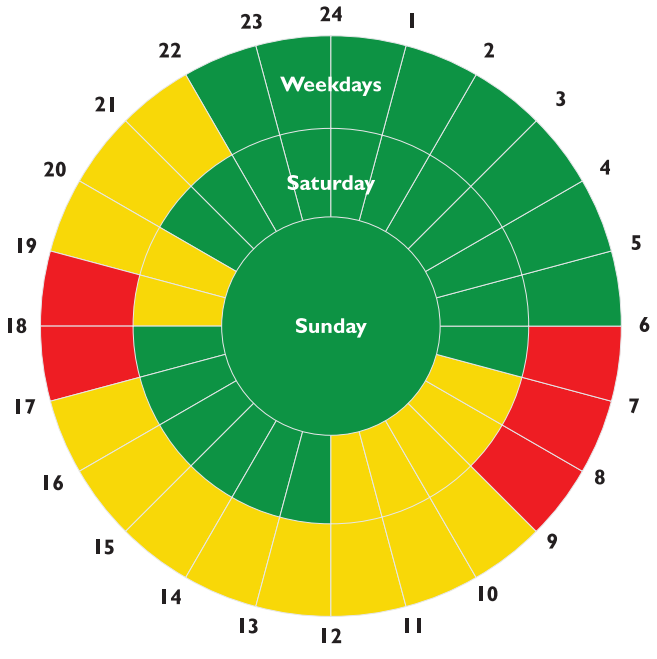
Low demand season



High demand season



Typical users

Small to large power users who will be able to shift much of the electricity consumption (load) outside of the peak hours. The maximum benefit will be achieved by preventing or limiting usage during the peak hours and therefore reducing the peak energy charges on the bill. This can be achieved through proper planning and hardwired controls. Ideal for irrigation and other agricultural processes.

NightSave Rural TOU tariff

NightSave Rural is an electricity tariff for high load factor rural customers, with a Notified Maximum Demand from 25 kVA at a supply voltage ≤ 22 kV (or 33 kV where designated by Eskom as rural).

During the high demand season (which is the three months of the year, June, July and August when the system demand peaks) the energy tariff is also high in comparison with the low demand season.

Typical users

High consumption during low demand season with a reduced load factor during high demand season. Pumping of water where most of the water is required, during the low demand season (September to May) or other agricultural processes during low demand season.

Single energy charge tariff

Landrate is a suite of electricity tariffs for rural customers with single, dual or three-phase conventionally metered supplies with an NMD up to 100 kVA with a supply voltage < 500V with the following charges:

On the Landrate tariff the energy charge is not dependent on the season or time when it is consumed.

The Landrate tariffs options are as follows:

Landrate 1	single-phase 16 kVA (80 A per phase) dual-phase 32 kVA (80 A per phase) three-phase 25 kVA (40 A per phase)
Landrate 2	dual-phase 64 kVA (150 A per phase) three-phase 50 kVA (80 A per phase)
Landrate 3	dual-phase 100 kVA (225 A per phase) three-phase 100 kVA (150 A per phase)
Landrate 4	single-phase 16 kVA (80 A per phase)
Landrate Dx	single-phase 5 kVA (limited to 10 A per phase)

*Currently these tariffs cannot be accommodated as a prepaid supply. If and when this is possible, the combining of the charges is required to accommodate the prepaid vending system.

Typical users

Landrate 1: Small holding with one or two houses and water pumps to provide water for the houses and gardens.

Landrate 2: Small farm with a house and farmworkers houses with a small irrigation system a small workshop or processing plant.

Landrate 3: Farm with medium-size irrigation system and/or small to medium processing plant.

Landrate 4: Small holding with a house and small water pumping system.

Landrate Dx: An electricity tariff for rural single phase non-metered supplies limited to 5 kVA typically suited to small telecommunication installations where the electricity usage is low enough not to warrant metering for billing purposes.

A number of factors influence the electricity account which includes seasonality, time-of-use, supply voltage, capacity of the POD and consumption or any combination of these factors. It is therefore necessary to analyse the farming operations and where needed, amend some of the activities to get the most suitable tariff for the particular operation or operations.

Eskom developed a tariff comparison tool which can be used to determine the most applicable tariff for each point of delivery when requested by the customer. As a customer, you will have to work hand in hand with the advisor to provide him with production seasons, times and equipment used. The accuracy of the tariff comparison not only depends on the electricity accounts but also on the accuracy of the information Eskom can obtain about the operations. In the case of a new application, the accuracy of the comparison will hinge on the information received from the customer.

Our customers have the right to:

- accurate measurement of consumption;
- error-free bills;
- be treated with respect;
- experience excellent treatment in terms of Eskom's electricity supply agreement;
- be dealt with promptly and efficiently;
- be treated fairly;
- have their property treated with respect;
- the confidentiality of their information;
- one-stop service without referral;
- quality of supply in terms of negotiated agreement; and
- be involved in issues affecting them.

Please refer to the latest addition of the Eskom tariff booklet for details on the different charges and fees available from the Eskom website: www.eskom.co.za\tariffs.

Together we can make a difference

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