



# Eskom

## Notified Maximum Demand Fact Sheet



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### What is Notified Maximum Demand (NMD)

The Notified maximum demand (NMD) is the capacity in kVA, measured over a 30-minute integration period, per point of delivery/supply that the customer requests and Eskom contractually agrees to make available during all time periods. The customer account NMD rating is designed to provide the correct signal that allows Eskom to plan for the provision of new capacity. According to the electricity supply agreement, Eskom is required to provide the contracted amount of NMD capacity, and the customer must never exceed this capacity. However, occasionally customers do exceed their NMDs and instead of Eskom disconnecting the customers for the breach, a NMD penalty is imposed. This is due to the fact that an exceedance is done without permission. The use of the extra capacity not allocated to their point of delivery puts the network under strain; hampers the ability to do proper network and capacity planning. Moreover it places the network and other customer's electricity supply and Eskom's ability to provide a firm supply at risk.

In providing the correct NMD pricing signal, the rules allow for an excess network capacity charge to be raised for monthly exceedances of the agreed upon NMD. This pricing signal incentivises customers to stay within their contracted demand and/or to notify their demand correctly or penalises them when exceeding the agreed NMD.

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### How can NMD be managed

Eskom mitigates this through an electricity supply agreement with all our customers, which among other terms, contracts the Notified Maximum Demand (NMD) of the supply to our customers. The NMD is the reservation of capacity by our customers so as to provide them with maximum power demand requirements in all time periods.

The NMD is utilised by Eskom to ensure that they are capable of supplying all customers with a firm quality of supply. However, there are instances where customers may exceed their NMD and this is due to their production equipment operating during unscheduled times or if there is an increase in productivity due to business growth. The NMD should never be exceeded unless previously agreed upon with Eskom.

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### What happens when NMD is exceeded

The amount payable through the excess network capacity charge in the event of an exceedance is calculated on the number of times the NMD is exceeded by the maximum demand multiplied by the portion of the maximum demand exceeding the NMD multiplied by the sum of the Distribution network capacity charge and the Transmission network charge (or for Miniflex and Ruraflex the network capacity charge) and if applicable the urban low voltage subsidy charge for the respective tariffs.

$$\begin{aligned} &\text{Excess Network Capacity Charge} \\ &= \text{No of times} \times (\text{MD} - \text{NMD}) \times (\text{Network capacity charge} + \text{Transmission network charge} \\ &\quad [+ \text{Urban low voltage charge}] ) \end{aligned}$$

Eskom provides an excel tool for you to understand the impact of your NMD. The tool can be found at

<http://www.eskom.co.za/sites/ldm/EnergyAdvisory/Pages/EnergyAdvisory.aspx>

**NOTE: Although the new Network Capacity Charge will be adjusted to the higher level from the month of first exceedance, this does not mean that Eskom gave approval for the new NMD.**

You are, however, able to avoid or minimise these excess network capacity charges by implementing any of the following solutions we can advise on:

#### **Power factor correction**

We can guide you in managing your Maximum Demand usage by installing power factor correction equipment, this may assist you to stay within your NMD limits. The power factor is the ratio of kW to kVA. Power factor correction is able to reduce your kVA demand profile bringing it closer to the kW demand profile. This will free up capacity and assist you with saving on demand costs, where you pay for demand.

**NOTE: see Eskom's brochures on power factor correction:**

<http://www.eskom.co.za/sites/eas/Energy%20solutions/Pages/Power-Factor.aspx>

#### **Load management**

In some instances, NMD is exceeded over a very short period however; this too can be avoided if your load profile is changed by shifting your load or staggering the start-up of your equipment. Loads may be unequally distributed across the various phases and balancing such would keep the MD lower. Equipment sizing might be incorrect affecting the maximum demand (impacting on the NMD). Hence, a variety of load management measures exist to address maximum demand and NMD issues.

**NOTE: see Eskom's Quality of Supply (QOS) brochure for more information.**

<http://www.eskom.co.za/sites/eas/Services/Pages/Power-quality-advice.aspx>

#### **Application for a supply increase**

The last option we offer our customers is for them to apply for a supply increase (NMD increase) as per their usage profile. This, however, is subject to and determined by the availability of capacity on the local power grid.





## How do our customers apply for a supply increase?

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Should our customers see the need for an increase we encourage them to apply by contacting our call centre requesting an increase in supply. It is important for our customers to be aware that there is a cost associated to this process. Our call centre will provide you with a quote which is valid for 30 days. A deposit will be required and should the current security deposit be inadequate a further increase in deposit / security will be requested together with the cost to upgrade

## What happens if the increase in NDM is approved?

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Once the process has been completed and should you settle for an increase in supply capacity, a new supply agreement will be entered into. This new agreement entails negotiating new terms and conditions to modify the connection and existing electricity supply between ourselves and the customer. Eskom has the right to evaluate such a modification before agreeing to increase the capacity (NMD) requested by the customer.

It is also important to note that, where a customer has multiple points of supply connected to a point of delivery, the NMD will be the sum of the maximum

demands for all of the points of supply connected to the point of delivery.

Related documents/information:

1. Notified Maximum Demand NMD Rules;
2. Latest Eskom Electricity Tariff Book;
3. NMD MExcel Calculation Tool; [brochure and the tool kit included](#)
4. Schedule of Standard Fees;

Please note that the aforementioned are:

- Mostly applicable to Eskom directly supplied customers, and,
- Applicable to the 2019/20 Eskom financial period (please check and confirm and get the latest from the website here).

For further assistance contact us on [advisoryservice@eskom.co.za](mailto:advisoryservice@eskom.co.za)



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