



Department of Environmental Affairs and Development Planning

PEAK DEMAND MANAGEMENT

FACT SHEET

Electricity is an important aspect of every business operations. Analysing the pattern of your energy use could be the first step to reducing operational cost. Understanding your energy use starts by examining your energy account. The energy account is made up of three contributing factors, which are: basic charges, demand charges (R/ kVA), and energy charge (R/kWh). These charges individually contribute to your energy bill and often cannot be easily altered. However managing your Peak Demand is an option that can be altered and has great potential to reduce your energy account by still allowing the same amount of electricity use.

WHY implement?

The reason why a company would manage its peak demand is to curb the total power demand from entering into a higher charge rate. Implementing peak demand management allows for better optimisation of energy consumption by using the same amount of energy but paying less. In other words despite not leading to any reduction of the actual energy consumption rate better management of peak demand can result in significant financial savings.

Managing your peak demand has environmental benefits, for every kWh saved 1kg less carbon dioxide is generated by power stations.

HOW to implement?

First do an energy audit by:

- Identifying all energy consuming equipment
- Identifying all equipment operational times
- Identifying consumption levels
- And analysing energy accounts

Secondly, after auditing, manage these energy loads by:

- Reducing simultaneous operations of equipment where feasible, in order to reduce peak demand (e.g. shift operation times of equipment not directly related to your core business and peak production output to run at other less costly operational times (e.g. at night)).
- Replacing old and inefficient equipment. For more information on energy efficiency visit the [Eskom](http://www.eskom.co.za) web site
- Curbing incorrect use of equipment, which usually results in over use of energy.

- Improving your power factor. For more information on your power factor visit the [NEPSI](#) web site.

- **Senior Energy Advisors** can assist industrialists in utilising their energy sources as efficiently as possible. For more information concerning your power factor, peak demand, a free energy audit and other topics visit the [Eskom](#) web page or contact Eskom's sales and Marketing department at 021-5581150.
- DSM (demand side management) means the planning implementation, and monitoring of end-user's activities designed to encourage consumers to modify patterns of electricity usage, including the timing and level of electricity demand. For more information visit the [Eskom](#) web page.

Sources and Useful Links:

- Eskom Demand Side Management (DSM): <http://www.eskomdsm.co.za/news8.php>
- Energy Saver Business: <http://www.sustainable.energy.sa.gov.au/pdfserve/advisory/industry/pdf/contract2.pdf>
- Eskom Energy efficiency: <http://www.eskomdsm.co.za/abeneff.php>
- Eskom: <http://www.eskom.co.za/>
- NEPSI: <http://www.nepsi.com/powerfactor.htm>

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The entire range of fact sheets can be found by visiting the www.capegateway.gov.za web page.