



A Newsletter for Eskom Distribution Customers

## Information on Small Scale Embedded Generation



**Eskom is ready to connect small scale embedded private generators to the electricity network but safety and compliance with the legal and technical requirements are paramount.**

- South African electricity consumers are quickly becoming **prosumers**, i.e. not just consumers of electricity but also producers of electricity.
- Prosumers installing **small-scale embedded generation (SSEG)** are typically either roof top or ground mount photovoltaic (PV) that is used to supplement their energy requirements from the network.
- Eskom supports renewable energy resources, but requires that connections to the Eskom grid be executed **safely and in compliance with the regulatory framework**.
- Prosumer SSEG's connected to the grid without the required **approvals from Eskom and the National Electricity Regulator (NERSA)** will be deemed unauthorised and poses serious risks to the environment, equipment, and the safety of people.



### **Unauthorised SSEG grid connections are a risk**

- They constitute a statutory offence and Eskom will consider the installation to be illegal until the generator is disconnected or authorised.
- Failure to comply will result in tamper fee charges, together with the disconnection of the main supply. Eskom will also raise charges to recover lost revenue.
- Prosumers will be required to make a declaration if the SSEG can be proven not be operating in parallel with the grid.

### **A legal SSEG bring benefits to the owner**

- Safe connection to the grid and **reduced risks** associated with injury, loss of life and damage to property.
- It **avoids the risk** of your supply being disconnected or prosecution when an unauthorised SSEG connection is identified.
- It offers **offset agreements** whereby the Eskom grid can be used as a battery to store surplus exported energy that can be used in the month to **offset billed consumption**.
- The exported capacity can also be used to **offset current and future monthly billed consumption** through **offsetting and banking service agreements**.
- Generators on medium-voltage networks can **wheel surplus export capacity** under defined conditions.
- Supply points can, under approved circumstances, be **consolidated to share exported generated capacity**.

## NERSA regulation considerations

- Consumers who are not connected to the grid and use generators for **standby or back-up** purposes are exempted from the regulations. **An off-grid (island) system** i.e. not connected to the Eskom network **does not require Eskom authorisation but must provide a declaration** to avoid confusion with grid tied systems.
- A customer with a SSEG of **no more than 100 kilowatts for self consumption** is exempted from **NERSA registration** as Eskom will keep a register for NERSA. Any embedded generator between 100kW to 1MW, that is grid-tied (whether exporting energy into the grid or not) will have to be registered with NERSA. SSEGs need to be registered and technically signed off before connecting to the grid. However generators > 1MW will require a license from NERSA. Please consult with NERSA on the latest regulatory requirements.

## SSEG application considerations

- The grid tie process requires customers to **apply and receive a quotation** from Eskom for the SSEG connection. Eskom applications can be submitted on the website at link <https://www.eskom.co.za/Whatweredoing/SSEG/Pages/default.aspx>
- The customer with SSEG must be on a **time-of-use tariff (TOU)** and **metering must be converted** to the relevant TOU tariff when installing a SSEG. (Currently residential customers are excluded pending regulator approval of the residential time-of-use tariff.)
- The customer will need to **provide all the required personal documentation** for the application submission.
- The customer may specify his/her preferred embedded generator network configuration.
- The customer will need to adhere to all the **legal and technical requirements** as stipulated by Eskom.
- The customer will need to pay the **application fee** to Eskom.
- The customer submits the **applicable NERSA document** to Eskom in support of the SSEG application.
- The customer pays all other applicable costs and submits the documents that Eskom will provide as part of the quote. Customers will also be required to submit the embedded generation installation report to Eskom.

## SSEG connection process

Once the completed SSEG application form is received, **Eskom will :**

- Confirm if the SSEG is to be on a **dedicated transformer** or a shared transformer. (Note that until the shared transformer framework is in place, a pilot **interim solution** may be possible under certain circumstances).
- Categorise the **voltage size** of the connection (medium or low);
- Analyse the **network requirements**;
- Provide a list of **legal and technical documentation** requirements to the customer;
- Invoice and confirm **payment of the application fee** before the application is processed;
- Provide a **quotation for the Eskom work** needed for the connection;

Once the customer's embedded generator has been **registered on the NERSA database**, Eskom will raise the **charges as per the quotation** required to proceed with completing the work. Eskom will also give the customer new supply agreements and a connection agreement for the SSEG.



**Did you know that by downloading the MyEskom Customer App** you can:

- Submit meter readings every month
- Notify Eskom of electricity supply problems
- Check your balance



**Manage your account  
from your mobile device**



<http://www.eskom.co.za/Pages/AppSelfService.aspx>

**For any SSEG related enquiries and more information, please go to the Eskom website**  
<https://www.eskom.co.za/Whatweredoing/SSEG/Pages/default.aspx>