Small-Scale Embedded Generator (SSEG)
Application information

Connect your generator to the electricity network – legally and safely

Important note

Before any system is synchronised (that is, grid-tied) with the Eskom network, it must be approved by Eskom, whether or not the customer exports surplus electricity onto the network. Only stand-alone/island systems that are not operating in parallel with the grid are excluded. However, Eskom needs an official declaration form completed by the customer that this system is not connected to the grid. Please consult with Eskom if assistance is required.

Connection criteria

- The customer must be on a **time-of-use (TOU) tariff** (that is, Ruraflex for rural customers and Miniflex or Megaflex for urban customers) prior to the SSEG application. If not on a TOU tariff, the customer must apply for conversion to the tariff.
- The TOU tariff and SSEG applications can be done simultaneously. Please call the Eskom contact centre, and obtain a reference number to track progress.
- The SSEG application process includes a capacity study, and the size of the supply change will be included in the budget quotation.
- Once the completed application form and quotation fee have been received, Eskom will commence with the process to issue the budget quotation. The budget quotation confirms that a connection is possible once all technical requirements have been met.

If the size of the photovoltaic (PV) installation is greater than 100 kW, the customer must register with the National Energy Regulator of South Africa (NERSA). Eskom issues the budget quote with a letter to NERSA to confirm that Eskom will allow the customer to connect to the Grid. The customer should only accept the quotation and pay the cost after NERSA registration. On acceptance of the quotation the customer has to:

- Provide proof of NERSA registration
- Pay all required fees
- Start ESA updated

Technical requirements

- For low-voltage installations (< 1000 V), the SSEG output installed capacity (kW) is limited to the lower of either 75% of the transformer size or 75% of the notified maximum demand.
- A lockable isolator that has been designed and installed correctly in line with SANS and with its physical location at a site agreed to by Eskom must be installed for all installations.

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- However, at the SSEG application stage, if Eskom evaluates it and confirms that the use of a lockable isolator is not acceptable due to its intended design or location or practical restrictions in Eskom's operating procedures, a dead grid safety lock (DGSL) should be used. This is compulsory.

Commissioning requirements

Before commissioning, all tests must be done according to the Embedded Generation Installation (EGI) compliance test report, and these must be signed off by a competent Engineering Council of South Africa (ECSA)-registered professional engineer or technologist.

The following documentation has to be submitted before the SSEG will be synchronised with the grid:

- EGI report
- Certificate of compliance (COC) for wiring of the installation – Should be indented under EGI
- •Inverter certificate indicating NRS 097 compliance - Should be indented under EGI
- •NERSA registration or licence certificate if SSEG > 100 kW – Should be included under Budget Quote acceptance
- •All labelling of electrical enclosures should be according to SANS 1042-1-2 standards - Should be indented under EGI

Contact details

For more information, contact our **contact centre** 08600 37566, or
email customerservices@eskom.co.za, or
visit our **website** https://www.eskom.co.za/Whatweredoing/SSEG/Pages/default.aspx.