



## Registration of Small-Scale Embedded Generation

The City of Cape Town supports Small-Scale Embedded Generation (SSEG) and would like to thank you for contributing to our goal of a greener and cleaner City by installing a Photovoltaic (PV) system. Over the past years, the City has seen a rapid uptake of rooftop solar PV. We currently have over 13 MVA of registered installed capacity with a further 11 MVA in the application phase.

All permanent SSEG systems must be registered and authorised by the City as per the City of Cape Town by-law<sup>1</sup>. This includes the following system types:

- Grid-tied with feed in (including hybrid):
  - Excess electricity generated by the PV system is fed back onto the grid.
- Grid-tied with reverse power flow blocking:
  - The output is connected to the household wiring which is simultaneously connected to the City's grid through the meter. Excess electricity generated by the PV system is blocked from feeding back into the grid.
- Grid-tied inverters which can operate in "islanded mode":
  - Used during general power outages.
  - Must meet SANS 10142-1:2017 - Clause 7.12 and Annexure P.
- Off-grid SSEG:
  - Not electrically connected to the electricity grid in any way

Emergency equipment such as standby generators do not need to be registered.

As customers may be unaware of the requirement to register and obtain authorisation for their SSEG, the City is allowing a grace period for existing systems to be registered and authorised. In order to benefit from this grace period, property owners must register for authorisation of their SSEG system with the City by the 28<sup>th</sup> of February 2019. After the grace period, the City will be implementing a R6,425.90 service fee for the disconnection of unauthorised SSEG connections. The supply of electricity to the property in question may be disconnected and only reconnected once the City is satisfied that the SSEG system is either disconnected, decommissioned or authorised and that the service fee has been paid.

Customers registering their system during the grace period may continue to operate the system<sup>2</sup>. This is based on the assumption that the system is compliant with the City's requirements. If during the registration and authorisation process, your system is found to be non-compliant, your system will need

<sup>1</sup> Under City of Cape Town Electricity Supply By-Law 2010, no generation equipment may be connected to the grid without the express consent of the Director of the Electricity Services Department,

<sup>2</sup> As per the Electricity Installation Regulations of the Occupational Health and Safety Act (clause 2), the property owner carries the responsibility for the safety of the electrical installation on the property. This includes everything related to the SSEG installation on the property.

to be disconnected until such time as it is deemed compliant and has received written authorisation from the City.

Systems that have registered for authorisation during the grace period have until the 1<sup>st</sup> of September 2019 to receive written authorisation from the City. If these systems are not authorised by this time, they may be liable for the service fee for the removal of unauthorised SSEG supply.

The City is legally required to ensure that the electricity distributed to all its consumers complies with set quality standards and that its employees are protected from inadvertent electrical shocks when working on the grid and that costs associated with maintaining the grid infrastructure maintenance are recovered from its consumers.

The City has accordingly developed technical specifications for grid-connected generation equipment and associated metering configurations and tariffs. National wiring codes (ensuring public safety) have also been established. To enable the City to ensure compliance with the abovementioned requirements, all permanent grid-tied electricity generators in the area supplied directly by the City of Cape Town must be authorised in writing. Off-grid systems must also be registered for authorization so that they are not mistaken for grid-tied systems.

Connecting generators to the grid without obtaining the necessary authorisation can result in systems endangering the City's staff and members of the public, interfere with the quality of supply and result in the City not fully recovering costs that are due from the consumer. Unauthorised generators which are grid-tied are therefore considered to be a form of tampering and will be dealt with accordingly.

The City looks forward to working with you to ensure that your PV system is safe and legal.

Go to [www.capetown.gov.za/solarpv](http://www.capetown.gov.za/solarpv) to start the registration process. For more information about the City's Small-Scale Embedded Generation (SSEG) program, visit [www.savingelectricity.org.za](http://www.savingelectricity.org.za).

Yours sincerely,



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Dr Leslie Rencontre  
Director: Electricity Generation and Distribution



Go to [www.capetown.gov.za/solarPV](http://www.capetown.gov.za/solarPV) to find out how to register your system