

Garscom SSEG Installation and Registration

High-level Guidance Summary

01 March 2024

1. Small Scale Embedded Generation (SSEG) Definition

Electrical generators that can connect and operate in parallel with the grid/network (by synchronising with the grid), are seen as embedded generators (EG).

EG smaller than 1MVA (1000kVA) are defined as small scale embedded generators.

In South Africa Solar PV is the main technology type used as an SSEG, but wind, biogas electricity, hydro power and diesel/petrol generators connected to the grid are also forms of EG.

Source: <https://www.sseg.org.za/faq/>

2. SSEG registration – Future requirement

Registration of SSEG with CoT (City of Tshwane) is not a law yet. It should however be noted that the processes around SSEG registration started in 2017 already and it is imminent to become law in the foreseeable future.

Registration of SSEG will require households and/or businesses to register their planned SSEG systems with CoT (City of Tshwane). At present there are limited guidelines available from CoT on this matter, apart from the application forms, which indicates a turn-around time of 6 months for approval.

There are also no guidelines how existing SSEG will be dealt with when registered.

An eMail has been sent to CoT on Wed 21 Feb 2024 09:48 to answers questions and provide guidance of this matter; no feedback has been received yet at the time of completing this document.

3. Systems currently targeted for future registration

Any SSEG equipment (in single form or part of a solution) which will connect to the grid will have to be registered as per process.

This includes:

- Solar PV
- Inverters
- Battery Systems
- Static Generators (permanently connected)
- Anything else as defined by official SSEG documentation

4. Systems currently excluded from future registration

Mobile generator units (petrol/diesel etc.) which are used to connect power via a **loose electrical cable / extension** to the premises to power appliances, during load shedding, as an example. After the generator is used the power extension lead gets disconnected when CoT power is restored.

Important note:

- A mobile generator unit connected to the electrical distribution board of the premises requires a CoC
- A mobile generator unit with a connection to SSEG equipment (i.e. Inverter), to be used as a backup unit, is seen as a static generator and will require registration in future.

5. SSEG registration – Current status in CoT

Registration is not enforceable by law yet, but households and businesses, as well as the installer/s, should **take note of the non-negotiable adherence to the required standards of installation**; this will ensure the owner of the premises will be able to adhere to any future requirement for registration.

Presently, households and businesses **DO NOT** have to register any SSEG installations.

The current minimum requirements are:

- All SSEG installations must adhere to SANS10142
 - SANS10142 is one of the standards being developed concerning embedded generation installations; this document is available on the internet but the actual target audience are electricians, engineers and installers
- An electrical Certificate of Compliance, henceforth CoC, is a non-negotiable requirement for any SSEG installation

Important notes:

- A CoC for any new installation at an existing premises must be supplementary to the existing CoC for the applicable premises and need to reference this existing CoC certificate number
- If there is no existing CoC for the premises a new one should be obtained for the premises which must include the new installation/s before it is commissioned (i.e. made live)
- A CoC for any new installation without reference to a valid existing CoC for the premises means nothing
 - Insurance companies usually only ask for the new CoC when one adds the SSEG to one's Home Owners Insurance
 - This is a very important point to take note of and in a case like this:
 - Obtain the CoC certificate number of the existing CoC and ask the installer to add it to the new CoC, or
 - If the existing CoC certificate number is no obtainable, obtain a new CoC for the entire premises
- See additional notes in section 6. Electrical Certificate of Compliance (CoC)

6. Electrical Certificate of Compliance (CoC)

The purpose of a CoC is to prove that all of the electrical work and installations on a premises are in good working order, and adheres to the necessary required standards.

A CoC can be obtained from a qualified and registered installation electrician. *

Important notes:

- Only a qualified and registered installation electrician with a Wireman's License can issue a CoC *
- If there is an existing CoC for the premises:
 - There is no need to obtain a new one, provided there were no changes to the electrical installation of the premises since the time the CoC was issued, regardless of the age of this CoC
 - Any new CoC must reference the existing CoC certificate number
- A new CoC is therefore to be obtained when:
 - There are changes to the existing electrical installation of a premises where the previous electrical installation is altered (SSEG or other)
 - When the property is sold
 - Property agents generally demand a new CoC when the property is sold; this must then include the entire electrical system on the premises, i.e. building/s, electrical fence, etc. They will also require a gas CoC for any gas installations and in some cases, they may also ask for a plumbing CoC

7. Actions currently proposed for households and businesses in Garscom

- **Very Important:**
 - Adhere to the minimum requirements in section 5. SSEG registration – Current status in CoT
- Use reputable companies and/or electricians for any electrical work to be done at the premises, whether it is for SSEG or normal electrical work
- Insist on a new CoC if changes were made to or an installation was done on the electrical system
 - Refer to section 6. Electrical Certificate of Compliance (CoC)
- For now, ignore requests/demands for SSEG registration until clear guidance from CoT is received or advised differently via Garscom communication (Garscom will keep you updated)

8. Additional reading material

- Please visit: <https://www.sseg.org.za/faq/> and download the FAQ Handbook
 - It is a comprehensive guide covering Solar rooftop PV generation in municipalities with frequently asked questions included

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