



**APPLICATION FOR THE CONNECTION OF EMBEDDED GENERATION**

This application form is for all types (grid-tied, off-grid) of embedded generation (EG) connections to the electrical installation of residential, commercial or industrial customers.

By making application and signing this form the applicant gives consent to the processing of his/her/its personal information as reflected thereon, as understood in terms of the Protection of Personal Information Act, 2013, and to the further processing thereof internally within the City of Cape Town and to its contractors and service providers and its research partners, subject to the conditions of the said Act.

A separate 'Application for a new or modified electricity supply service' form must also be completed where the City will replace the existing credit meter with an AMI meter under 100 Amp and applications bigger than 350kVA where a network study is required.

Please note that registration is **required** for geysers connected to photovoltaic (PV) solar panels.

**ENQUIRIES AND FORM SUBMISSIONS**

SCP: Customer Services: Area North	SCP: Customer Services: Area East	SCP: Customer Services: Area South
Electricity House City, Cnr Buitengracht & Hout Street, Cape Town, CBD; (tel) 021 444 1394/6 <b>Email:</b> <a href="mailto:electricityapplications.north@capetown.gov.za">electricityapplications.north@capetown.gov.za</a>	Energy Head Office, Bloemhof Complex, Bloemhof Street Bellville; (tel) 021 444 8511/2 <b>Email:</b> <a href="mailto:electricityapplications.east@capetown.gov.za">electricityapplications.east@capetown.gov.za</a>	First Floor, Wynberg Electricity Depot, Rosmead Avenue, Wynberg (tel) 021 400 4750/1/2/3 <b>Email:</b> <a href="mailto:electricityapplications.south@capetown.gov.za">electricityapplications.south@capetown.gov.za</a>

**A. PROPERTY OWNER**

You, as the property owner, will need to provide the following details:

SERVICE LOCATION		PROPERTY OWNER	
ERF NO.		TITLE	
PHYSICAL ADDRESS		FIRST NAME	
		SURNAME	
TOWNSHIP / SUBURB / FARM		BUSINESS PARTNER NO.	
POSTAL CODE		MUNICIPAL RATES ACCOUNT NO.	

PROPERTY OWNER CONTACT DETAILS			
WORK NO.		CELLPHONE NO.	
EMAIL ADDRESS			

IF NO PROXY EXISTS ALL DOCUMENTATION WILL BE SENT TO THE EMAIL ADDRESS AS LISTED ABOVE

SITE PLAN							
LATITUDE (DD MM SSS)	\$		°		'		"
LONGITUDE (DD MM SSS)	E		°		'		"
<b>FOR COMMERCIAL / INDUSTRIAL ONLY</b> Attach plan showing location and dimensions of intended installation infrastructure in relation to the existing buildings and property point of connection (Tick box if plan is attached)							

APPLICATION TYPE (Tick the appropriate boxes)			
RESIDENTIAL	<input type="checkbox"/>	COMMERCIAL / INDUSTRIAL	<input type="checkbox"/>
NEW	<input type="checkbox"/>	REVISED APPLICATION	<input type="checkbox"/>
SYSTEM MODIFICATION OR EXPANSION	<input type="checkbox"/>	CHANGE OF PROPERTY OWNER	<input type="checkbox"/>

**B. TECHNICAL INFORMATION**

Your installer will need to complete, or provide information for the following:

TYPE OF ENERGY SOURCE (Tick the appropriate boxes)	PV	WIND	LANDFILL	BIOMASS	BIOGAS	HYDRO
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MODE OF EMBEDDED GENERATION (Tick the appropriate boxes)			
Energy from embedded generation to be used within a customer's electrical installation and <b>excess to be exported</b> to City of Cape Town electricity distribution network.	<input type="checkbox"/>	Energy from embedded generation to be used within a customer's electrical installation and <b>no excess to be exported</b> to City of Cape Town electricity's distribution network.	
		Reverse flow blocking installed	YES <input type="checkbox"/> NO <input type="checkbox"/>

BATTERY STORAGE			
YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
		kWh	

PRELIMINARY DESIGN	
Please attach a schematic diagram design showing major components, proposed point of common coupling, isolating and interfacing devices with City of Cape Town electrical network, protection schemes, customer electrical installation, operating characteristics, etc.	

TOTAL CAPACITY OF EMBEDDED GENERATION (kVA AND PF) (Attach schedule for each unit if more than one generation unit or location.)	MAXIMUM TOTAL GENERATION CAPACITY OF SSEG (kVA) TO THE GRID (If applicable)

PROPERTY DISTRIBUTION BOARD MAIN CIRCUIT BREAKER					
AMPERE (A)		PHASE (Tick the appropriate box)	SINGLE		THREE
PROPERTY EXISTING METERING DETAILS					
METER NO.					
METER TYPE (Conventional (credit)/ prepayment / bi-directional AMI)					
MAKE AND MODEL OF INVERTER					
MANUFACTURER		MODEL			
QUANTITY		PHASE (Tick the appropriate box)	SINGLE		THREE

#### TYPE OF EG INSTALLATIONS

Please consult your installer if uncertain.

PLEASE CHOOSE TYPE OF PHOTOVOLTAIC SYSTEM BEING APPLIED FOR (please tick)

<b>1. GRID-TIED SSEG</b>					
<b>2. GRID-TIED HYBRID SSEG</b>					
<b>MAXIMUM BATTERY CHARGER POWER (kVA or Amps)</b> (maximum battery charger power drawn from the grid (DB board) by the inverter to charge the batteries.)					
<b>3. STANDBY SSEG - Passive standby UPS utilised as an standby hybrid SSEG</b> (Grid assisted and interconnected with electrical installation)					
<b>MAXIMUM BATTERY CHARGER POWER (kVA or Amps)</b> (maximum battery charger power drawn from the grid (DB board) by the inverter to charge the batteries.)					
<b>INVERTER CONFORMS TO SANS 62040-3 : Figure B.3 – Stand-by topology</b>			YES		NO
<b>4. STANDBY SSEG - Alternative supply</b> (interconnected with electrical installation)					
<b>5. OFF-GRID</b> (separated and not interconnected with electrical installation)					
<b>6. SOLAR PV HEATER (GEYSER)</b>					
<b>7. ANY OTHER EG TYPE</b> (Please specify)					

**A. CLEARANCE BY OTHER CITY OF CAPE TOWN DEPARTMENTS** (Approval letter required if applicable from the relevant department. See notes.)

Notes:

- Energy & Climate Change Directorate will require prior written approval from the following departments, where applicable. Applications will not be considered until all relevant approvals have been obtained, e.g.
  - Planning and Building Development Management (Area offices) - Zoning/subdivision/building structure plans
  - City Health Specialised Services (021) 4003781 - Noise impact assessment and ventilation
  - City Health Specialised Services (021) 5905200 - Air pollution and quality (only applicable to fuel-burning technologies)
- Photovoltaic (PV) EG applications will require approval from Planning and Building Development Management only if:
  - Rooftop installations: PV panel(s) in its installed position projects more than 1,5m, measured perpendicularly, above the roof and/or projects more than 600mm above the highest point of the roof;
  - Installations on the ground: PV panel(s) in its installed position projects more than 2,1 meters above the natural/finished ground level.
- PV EG applications typically do not require approvals for noise impact assessment and ventilation nor air pollution and quality.
- Wind and other generation prime mover generation requires an EIA and other approvals.

#### D. INSTALLER DETAILS AND DECLARATION

INSTALLER DETAILS			
INSTALLER			
ACCREDITATION / QUALIFICATION			
ADDRESS			
		POSTAL CODE	
CONTACT PERSON			
WORK NO.		CELLPHONE NO	
EMAIL ADDRESS			

I acknowledge that the City of Cape Town Energy & Climate Change Directorate will proceed with the review of this grid-tied embedded generation interconnection application. I understand that:

- I will have to pay for both in-house and outsourced engineering studies conducted as part of this review, should these be required; and a quotation for such work will be provided beforehand, allowing me to cancel or modify the application should I wish to do so.
- I further acknowledge that the City of Cape Town will provide this information to the National Energy Regulator of South Africa (NERSA) and other Distributors, as required.

ECSA REGISTERED PROFESSIONAL <sup>A</sup> (Must be completed for only grid-tied and grid-tied hybrid SSEG installations)			
NAME AND SURNAME			
REGISTRATION NO.		REGISTRATION CATEGORY	

(Note: The details of the ECSA registered professional<sup>A</sup> must be provided as they must be involved in the design of the system and be familiar with the technical details of the intended generation technology and assist in the completion of this application form. ECSA professional sign-off is mandatory at the commissioning stage in accordance with Appendix 1)

DECLARATION	
I/we, the owner(s) of the property, hereby declare that I/we have taken the necessary steps to ensure all information contained in this declaration form is correct. I/we further acknowledge and agree to comply with the provisions of the City of Cape Town Electricity Supply By-law and Conditions of Supply <sup>B</sup> .	
SIGNED (PROPERTY OWNER)	
DATE	

If signing on behalf of the property owner(s), an approved letter of proxy<sup>D</sup> must be attached to this declaration.

PROXY DETAILS	
TITLE	
FIRST NAME	
SURNAME	
SIGNED (PROPERTY OWNER)	
DATE	

<sup>A</sup> "ECSA professional" refers to an electrical professional engineer, professional technologist, professional certificated engineer or professional engineering technician (domestic only) who is registered with the Engineering Council of South Africa (ECSA).

<sup>B</sup> Available under Reference Documents at <http://www.capetown.gov.za/electserviceforms>

<sup>C</sup> Only the property owner may sign this declaration. Proof of property ownership must be attached to the application form. This can be a property rates account, title deed or proof of registration. If applying on behalf of the property owner(s), an approved letter of proxy must be attached to the application. If the owner is a private person, a copy of his/her identity document or passport must be attached to the declaration form. If the owner is not a private person, a copy of the business/trust/body corporate registration form must be attached to the declaration form, together with a copy of the signatory's identity document.

<sup>D</sup> If the owner is a natural person, a letter is required wherein the property owner appoints the signatory as a proxy. The letter must be signed by the owner and accompanied by a copy of his/her identity document. If the owner is not a natural person, a resolution of the board (or equivalent strategic body, depending on the nature of the company) is required, authorising the signatory to sign on behalf of the company. The property owner's details should still be completed in the property owner section. The only change is in the declaration section where, in the case of a proxy, the owner's name is filled in without his/her signature and the proxy signs on behalf of the owner in the appropriate field. All other documentation required has to be submitted, including proof of ownership.

## APPENDIX 1 – GRID-TIED SSEG INSTALLATION COMMISSIONING REPORT

The Commissioning Report must be completed by an ECSA registered professional once you have received permission to install and your system has been installed. The following SSEG Commissioning Report must be submitted for each installation, confirming compliance with the City's requirements.

SITE DETAILS			
PROPERTY ADDRESS			
SUBURB		POSTAL CODE	
ERF NO			
BUSINESS PARTNER NO		MUNICIPAL RATES ACCOUNT NO	
CONTACT DETAILS			
SSEG PROPERTY OWNER			
CONTACT PERSON			
CONTACT TELEPHONE NO			
SSEG DETAILS			
MANUFACTURER AND MODEL TYPE			
SERIAL NUMBER/S OF INVERTER/S			
TOTAL CAPACITY OF EMBEDDED GENERATION (kVA & PF)			
SINGLE-PHASE OR THREE-PHASE			
INSTALLER DETAILS			
INSTALLER			
ACCREDITATION / QUALIFICATION			
ADDRESS			POSTAL CODE
CONTACT PERSON			
WORK NO		CELLPHONE NO	
EMAIL ADDRESS			
INFORMATION TO BE ATTACHED			
FINAL COPY OF CIRCUIT DIAGRAM	APPLICABLE ELECTRICAL INSTALLATION CERTIFICATE OF COMPLIANCE IN TERMS OF SANS 10142-1 OR SANS 10142-2 MV INSTALLATION SAFETY REPORT		SIGNED CONTRACT FOR SSEG
<b>COMPULSORY DECLARATION – TO BE COMPLETED BY ECSA REGISTERED PR ENG, PR TECH ENG, PR CERT ENG FOR ANY SSEG INSTALLATION OR PR TECHNI ENG FOR RESIDENTIAL SSEG INSTALLATIONS ONLY.</b>			
THE SSEG INSTALLATION COMPLIES WITH THE LATEST EDITIONS AND RELEVANT SECTIONS OF NRS 097-2-1 AND SOUTH AFRICAN GRID CODES.			
THE LOSS OF MAINS PROTECTION HAS BEEN PROVED BY A FUNCTIONAL TEST CARRIED OUT AS PART OF THE ON-SITE COMMISSIONING <i>(e.g. a momentary disconnection of the grid supply to the SSEG in order to prove that the loss of mains protection operates as expected.)</i>			
PROTECTION SETTINGS HAVE BEEN SET TO COMPLY WITH THE LATEST EDITION OF NRS 097-2-1 AND THE APPROVED GENERATION CAPACITY MAXIMUM OUTPUT OF THE INVERTER HAS BEEN LIMITED BY APPROPRIATE HARDWARE OR SOFTWARE SETTINGS.			
SAFETY LABELS HAVE BEEN FITTED IN ACCORDANCE WITH THE LATEST EDITION OF NRS 097-2-1, SANS 10142-1 AND SANS 10142-2 MV INSTALLATION SAFETY REPORT			
THE GRID-TIED SSEG INSTALLATION COMPLIES WITH THE RELEVANT SECTIONS OF SANS 10142-1 AND AN INSTALLATION CERTIFICATE OF COMPLIANCE AND TEST REPORT FOR ELECTRICAL INSTALLATIONS, ARE ATTACHED.			
WHERE APPLICABLE FOR A GRID-TIED HYBRID SSEG INSTALLATION, THE SUITABLY INTERLOCKED CHANGE-OVER SWITCH CONFORMS TO THE REQUIREMENTS OF APPENDIX 4 OF THE REQUIREMENTS FOR THE SSEG DOCUMENT			
REVERSE POWER FLOW BLOCKING PROTECTION HAS BEEN INSTALLED AND COMMISSIONED TO PREVENT REVERSE POWER FLOW INTO THE ELECTRICITY DISTRIBUTION NETWORK <i>(where applicable)</i>			
COMMENTS <i>(continue on a separate sheet if necessary)</i>			
NAME AND SURNAME			
ECSA PROFESSIONAL CATEGORY			
ECSA REGISTRATION NO.			
SIGNATURE			
DATE			