

# **APPLICATION FOR THE CONNECTION OF A SMALL-SCALE EMBEDDED GENERATOR (SSEG) TO THE ESKOM NETWORK**

**Revision: April 2022 V1**

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This application form is for the connection of generators of capacity that are no more than 1MW in size, to the Eskom Grid

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### Process

- You are required to complete this application in full and please ensure that if you are an existing Eskom customer you provide the details of your existing supply.
- Eskom will acknowledge receipt of the application and will contact you using details provided.
- Once all the relevant information has been gathered by Eskom from the Customer (or the technical agent representing the Customer) Eskom will respond to the application in the form of a Quotation fee and thereafter a quotation containing connection charges for the connection works that will be required.
- The quote will comprise of the network impact and limitations (if any), technical scope of work, timing of the commissioning date, and terms and conditions that may apply.
- The work required on Eskom's side will only start once the applicant has accepted Eskom's quotation and any other agreements that are applicable, in writing.
- The applicant will be required to comply with the requirements set out in Schedule 2 of the Electricity Regulation Act (ERA) regarding licensing, registration or to be exempt from registration, for your generation facility. **Any SSEG installation above 100kW requires registration approval from NERSA. The applicant is required to obtain this approval before Eskom will allow the connection to the grid.**
- As part of the Eskom technical requirements, the customer must at own cost:
  - o provide an isolation point after the Eskom meter that is accessible by Eskom (within 2m from Eskom meter however not fixed to the Eskom structure).
  - o provide a Single Line Diagram inside the kiosk of the isolator.
  - o provide a DGSL (Dead Grid Safety Lock) if there is no isolator or an Electromechanical switch with a coil energised from the utility side.
  - o have the "embedded generation installation (EGI) compliance test report" which forms part of Eskom's connection and use of system agreement completed by a professionally registered competent person. A copy of this report can be found on the Eskom website.

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### Definition:

Dedicated Network (Feeder)	Section of the utility network that exclusively supplies a single customer/generator. See Annexure A  Note: A dedicated network can be a dedicated LV feeder (directly from transformer busbar), or a dedicated MV/LV transformer.
Shared Network (Feeder)	Section of the utility network that supplies more than one customer/generator connected at LV See Annexure A
SSEG Size in the application	Is the total AC active power output of the SSEG in the entire facility, whilst generating at full active power output. For simplicity, the rated nameplate capacity of the inverter.  Note: The generator size should not exceed the 75% limitation of the transformer or NMD for dedicated networks. Do not use the 75% limitation as a default value for application but the exact size of the system.
MEC: Maximum export capacity as per the customers application form	Means the total AC active power exported into the grid as measured at the point of utility connection, with the EG generating at full active power output and the other load (consumption) circuits connected to the EG, measuring minimal or no-load consumption.

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### Applicable technical and other relevant documents:

It is the applicant's responsibility to comply with:

- The applicable technical, design and operational standards detailed in the Eskom Standards, South African National Standards, South African Grid Code and the applicable South African Distribution Codes. Copies of the applicable Codes may be downloaded from NERSA's website - [www.nersa.org.za](http://www.nersa.org.za).
- The Occupational Health and Safety Act, (Act 85 of 1993) and the requirement for a Certificate of Compliance for SSEG connections.

Information on the Eskom standards can be obtained by registering on the NRS website: <https://scot.eskom.co.za> and use the following steps:

1. Click on "Login" on the right hand corner, and a login field will appear.
2. Click on "New user" and fill in your details as complete as possible.
3. Click on "Submit"

The Electricity Regulation Act 6 of 2006 details the legislative requirements with regard to the generation, transmission, distribution and trading of electricity. In this regard, you will be required to comply with any conditions in the Act that may pertain to generation and trading of energy as applicable.

### Environmental Requirements:

The applicant must ensure that they are aware of:

- the statutory approvals from all regulatory bodies, infrastructure providers and utilities that are required for the construction and operation of a generation plant and associated activities,

infrastructure traversing land needs to be protected by a servitude/s, which is registered against the title deed of the affected property.

### Eskom contact details:

To complete an application form, please contact Eskom on **08600 37566**, or go to the Eskom website: [www.eskom.co.za/distribution/small-scale-embedded-generators/](http://www.eskom.co.za/distribution/small-scale-embedded-generators/)

### Standard quotation fee for SSEG customers from 1 April 2022 till 31 March 2023.

The cost of producing a generator quotation is an actual cost to Eskom and a standard quotation fee will be charged for the generator quotation.


The quotation fee will be payable upfront and will form part of the connection charge. This fee is non-refundable if the quote is not accepted by the customer. Customers are to be advised of the fees payable upfront as required in terms of the Consumer Protection Act.

SSEG SIZE CATEGORY	APPLICABLE STANDARD QUOTATION FEE
0 – 350kW (SSEG with an existing LV Eskom supply)	R 1 861.15 + VAT = R 2 140.32
> 350kW – 1MW (SSEG with an existing LV Eskom supply)	R 3 356.52 + VAT = R 3 860.00
> 0kW – 1MW (SSEG with an existing MV Eskom supply – (minor process)	R 3 356.52 + VAT = R 3 860.00
> 0kW – 1MW (SSEG with an existing MV Eskom supply – (major process)	R16 765.22 + Vat = R 19 280.00
*These fees are subject to change based on the approved rates per year	

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	<b>Application for the connection of a small scale embedded generator (SSEG) to the Eskom network</b>	Template identifier	240-xxxxxxxxx	Rev	0
		Document identifier	240-156267360		
		Effective date	April 2021		
		Review date	March 2023		

Existing customer <input type="checkbox"/> New application <input type="checkbox"/>											
<b>DETAILS OF CUSTOMER</b>											
1. Existing account number of applicable supply point.											
2. Name of Eskom customer / applicant		Identity No.									
3. Eskom Customer Contact Details	Cell No.	e-Mail:									
4. Company name		CC Reg. No.									
5. Company Contact person											
6. Company Contact person's details	Cell No.	e-Mail:									
7. Postal address	P O Box										
	City / Town		Postal Code								
<b>DEVELOPER/INSTALLER/CONSULTANT INFORMATION</b>											
8. Title and Name of developer/installer		CC Reg. No.									
9. Company Contact person											
10. Developer/Installer contact details	Cell No.	e-Mail:									
11. Date of application	<table border="1" style="display: inline-table; text-align: center;"> <tr> <td>Y</td><td>Y</td><td>Y</td><td>Y</td><td>M</td><td>M</td><td>D</td><td>D</td> </tr> </table>			Y	Y	Y	Y	M	M	D	D
Y	Y	Y	Y	M	M	D	D				
12. Postal address:	P O Box:										
	City / Town		Postal Code:								
<b>SSEG SITE INFORMATION</b>											
13. Physical address of the connection site											
14. GPS coordinates (Degrees, minutes and seconds (DMS) e.g. 41°24'12.2"S 2°10'26.5"E.)											
15. Pole number of transformer where generator is to be connected											
16. Current tariff of supply point											

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ADDITIONAL DOCUMENTATION		
17. Eskom bill attached	Bill of point of supply where SSEG is to be connected	
18. Letter of permission (If required) attached	Letter granting the project developer permission to apply on the customer's behalf from the developer's client (Eskom customer).	

<b>Signature of Eskom Customer / applicant</b>	
<b>Name &amp; Surname:</b>	<b>Date:</b>

<b>Signature of Installer/developer:</b>	
<b>Name &amp; Surname</b>	<b>Date:</b>

GENERAL AND TECHNICAL INFORMATION														
<b>New SSEG connection</b> <input type="checkbox"/>	<b>Upgrade of existing SSEG connected</b> <input type="checkbox"/>													
1. Size of NEW SSEG planned (Inverter output in kilowatt)	.....planned kW													
2. Size of EXISTING SSEG installation (Inverter output in kilowatt)	.....installed kW													
3. Will the power generated be used for Direct Connection on Single Account OR for Consolidation of multiple Eskom Accounts? Please tick applicable box.  If Multiple accounts, please list the accounts.	Direct Connection (Single Acc.) <input type="checkbox"/>  Consolidation of multiple Eskom Accounts <input type="checkbox"/>  <table border="1"> <thead> <tr> <th>Account Number</th> <th>Account Number</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>6.</td> </tr> <tr> <td>2.</td> <td>7.</td> </tr> <tr> <td>3.</td> <td>8.</td> </tr> <tr> <td>4.</td> <td>9.</td> </tr> <tr> <td>5.</td> <td>10.</td> </tr> </tbody> </table>		Account Number	Account Number	1.	6.	2.	7.	3.	8.	4.	9.	5.	10.
Account Number	Account Number													
1.	6.													
2.	7.													
3.	8.													
4.	9.													
5.	10.													
4. Is the existing Eskom supply point from a dedicated LV feeder, shared LV feeder or a direct medium voltage (MV) supply – Tick the applicable box (See description of options under Definitions)	<b>Dedicated LV feeder supply</b> <input type="checkbox"/> <b>Shared LV feeder supply</b> <input type="checkbox"/> <b>Direct (bulk) MV supply</b> <input type="checkbox"/>													

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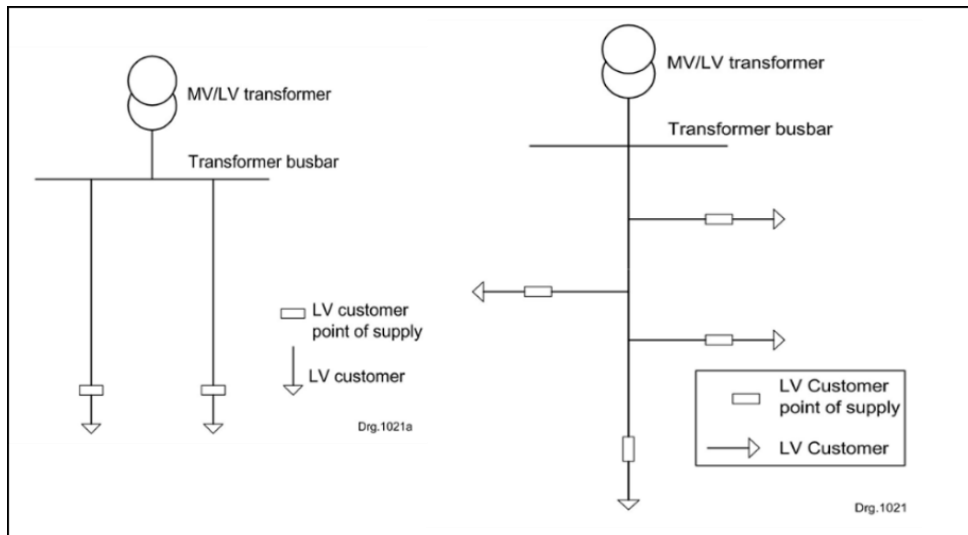
5. Please indicate the actual transformer size or the Notified Maximum Demand (NMD) if known.	<table border="1"> <tr> <td>16kVA</td> <td>25 kVA</td> <td>32 kVA</td> <td>50 kVA</td> <td>100 kVA</td> <td>200kVA</td> </tr> <tr> <td>315kVA</td> <td>500kVA</td> <td>1MVA</td> <td>Other</td> <td colspan="2"></td> </tr> <tr> <td colspan="3">NMD _____ kVA</td> <td colspan="3">Do not know <input type="checkbox"/></td> </tr> </table>	16kVA	25 kVA	32 kVA	50 kVA	100 kVA	200kVA	315kVA	500kVA	1MVA	Other			NMD _____ kVA			Do not know <input type="checkbox"/>		
16kVA	25 kVA	32 kVA	50 kVA	100 kVA	200kVA														
315kVA	500kVA	1MVA	Other																
NMD _____ kVA			Do not know <input type="checkbox"/>																
6. Will the existing NMD (kVA or Amps) need to be amended (YES or NO). If YES, please provide the new NMD in KVA or Amps.	<b>Yes</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/> If YES, please provide the new NMD in kVA or Amps. .....kVA or .....Amps																		
7. Will any energy be exported onto the Eskom grid? (YES or No)  <b>If yes:</b> <ul style="list-style-type: none"> <li>please provide the maximum export capacity for energy (in kW) to be supplied to the Eskom grid <b>as per definition of MEC</b></li> <li>tariff option for export</li> </ul>	<b>Yes</b> <input type="checkbox"/> <b>No(Own Use)</b> <input type="checkbox"/>  .....kW (MEC)  Offset <input type="checkbox"/> Offset with Banking <input type="checkbox"/>																		
8. Energy source; Wind, PV, Landfill, Biomass, Biogas, Hydro; and generator size.          9. Type of array if PV is selected	Indicate with an X which energy source and provide Name plate rating.  <table border="1"> <thead> <tr> <th>Energy Source</th> <th>Name Plate rating (kW)</th> </tr> </thead> <tbody> <tr><td>Wind</td><td></td></tr> <tr><td>Photovoltaic (PV)</td><td></td></tr> <tr><td>Landfill</td><td></td></tr> <tr><td>Biomass</td><td></td></tr> <tr><td>Biogas</td><td></td></tr> <tr><td>Hydro</td><td></td></tr> </tbody> </table>  Ground Static array <input type="checkbox"/> Ground tracking Array <input type="checkbox"/> Rooftop Static Array <input type="checkbox"/> Rooftop Tracking Array <input type="checkbox"/>	Energy Source	Name Plate rating (kW)	Wind		Photovoltaic (PV)		Landfill		Biomass		Biogas		Hydro					
Energy Source	Name Plate rating (kW)																		
Wind																			
Photovoltaic (PV)																			
Landfill																			
Biomass																			
Biogas																			
Hydro																			
10. Generator type:	Indicate with an X:  <table border="1"> <thead> <tr> <th colspan="2">Generator type</th> </tr> </thead> <tbody> <tr><td>Synchronous</td><td></td></tr> <tr><td>Asynchronous (induction)</td><td></td></tr> <tr><td>Inverter</td><td></td></tr> </tbody> </table>	Generator type		Synchronous		Asynchronous (induction)		Inverter											
Generator type																			
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Inverter																			
11. Is there an existing backup generator, on property? (Yes or No)	<b>Yes</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/>  If YES, please provide details on size of installation (in kW or Amps) .....kW <b>OR</b> .....Amps																		

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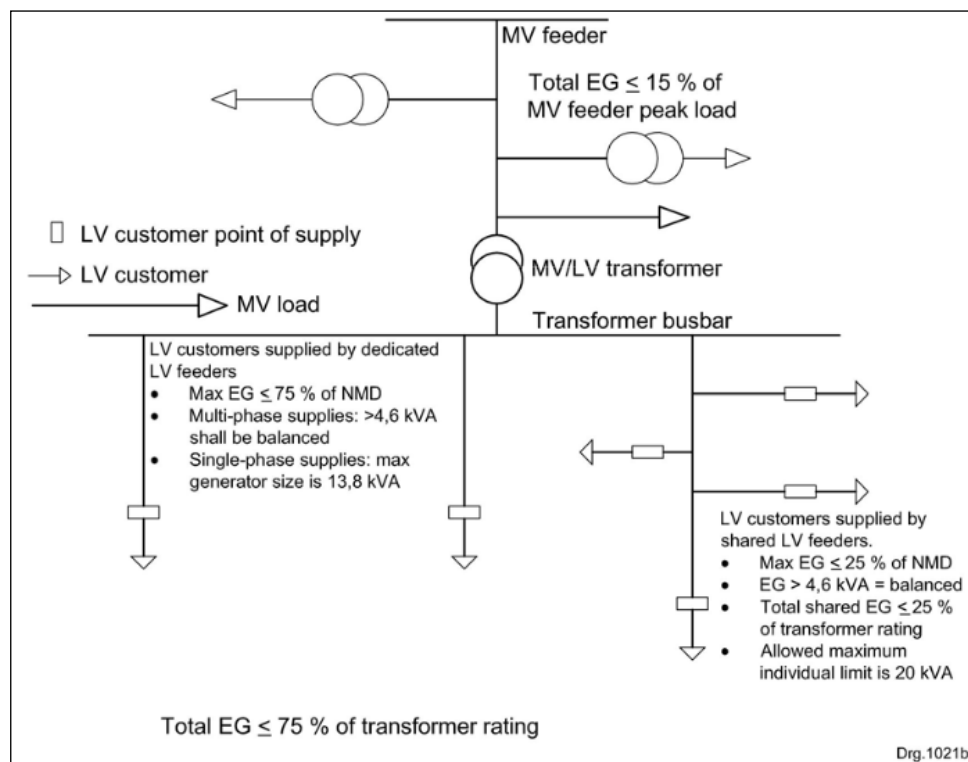
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## Annexure A



**Figure 1 Dedicated Feeder vs Shared Feeder**



**Figure 2 Summary of simplified connection criteria**

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