



APPLICATION FOR A CONNECTION  
OF A GENERATOR WITH CAPACITY  
GREATER THAN 1MW AND  
ASSOCIATED SUPPLY AT THE SAME  
POINT OF SUPPLY TO THE ESKOM  
NETWORK

01 July 2020

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## Introduction

*(This form should be completed if the generator in question will be synchronised with the Eskom grid.)*

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This application form outlines the minimum information required by Eskom to conduct an evaluation of the feasibility of connecting a generator that will also consume from the same point of supply within Eskom's networks.

This application form is in two parts.

1. Part 1 must be filled in for Eskom to provide an (non-binding) estimate of the cost of connection.
2. If the required conditions are met to proceed with a budget quotation, Eskom will request Part 2 of the application form to be completed for the detailed interconnection and power system studies.

With effect from 01 October 2013, the Eskom policy in terms of the provision of Cost Estimate Letter (CEL) has changed. A fee will be raised and is payable prior to issuing CEL to the customer, where applicable. CEL is the initial indicative cost information that is provided for customer projects. Proof of payment of the Cost Estimate Fee is required within 10 working days of submitting the application form part 1 where after Eskom will commence with the cost estimate studies. The invoice for payment will be issued within a day of receipt of application form.

All of the information stipulated in this application form must be provided prior to the commencement of any work required to prepare a Cost Estimate Letter and ultimately if approved, any Budget Quotation. The technical cost of connection as well the network charges are determined for the applicant from the information supplied in this document. Technical findings and constraints derived from the provided information shall also be communicated to the relevant applicant.

Applicants should also note that an application for a temporary construction supply or for an increase in demand is separate from this application, and the applicant is required to follow the standard Eskom application process.

It should be noted that it is the applicant's responsibility to comply with the applicable technical, design and operational standards detailed in the South African Grid Code and the South African Distribution Code. Copies of the codes may be downloaded from NERSA's website [www.nersa.org.za](http://www.nersa.org.za).

Eskom's specific technical requirements for the interconnection of embedded generation are described in a separate document, i.e. "Standard for the interconnection of embedded generation" (240-61268576). A copy of this standard will be provided on request. This application form may be completed as a hard copy or as a soft copy together with all supporting documentation. An electronic (soft copy) submission is preferred and can be submitted to the email addresses on the next page.

The customer will be contacted to confirm receipt of his/her application and provided with a reference number.

**Grid Access Unit Contacts:**

Region 1	Western Cape	Mr Are van Zyl <a href="mailto:are.vanzyl@eskom.co.za">are.vanzyl@eskom.co.za</a> Mr Bradley Box <a href="mailto:bradley.box@eskom.co.za">bradley.box@eskom.co.za</a> Ms Mongi Moshweshwe <a href="mailto:mongi.moshweshwe@eskom.co.za">mongi.moshweshwe@eskom.co.za</a>
	Eastern Cape	Ms Tembi Plaatjie <a href="mailto:tembi.plaatjie@eskom.co.za">tembi.plaatjie@eskom.co.za</a> Mr Lazola Ndondo <a href="mailto:Lazola.ndondo@eskom.co.za">Lazola.ndondo@eskom.co.za</a>
Region 2	Northern Cape	Ms Lebohang Motai <a href="mailto:lebohang.motoai@eskom.co.za">lebohang.motoai@eskom.co.za</a> Mr Mzwandile Madodonke <a href="mailto:Mzwandile.madodonke@eskom.co.za">Mzwandile.madodonke@eskom.co.za</a> Mr Motlatsi Makhari <a href="mailto:Motlatsi.makhari@eskom.co.za">Motlatsi.makhari@eskom.co.za</a> Mr Moreetsi Balepile <a href="mailto:Moreetsi.balepile@eskom.co.za">Moreetsi.balepile@eskom.co.za</a>
	Free State	Ms Lebohang Motai <a href="mailto:lebohang.motoai@eskom.co.za">lebohang.motoai@eskom.co.za</a>
Region 3	Gauteng	Ms Lorato Loate <a href="mailto:lorato.loate@eskom.co.za">lorato.loate@eskom.co.za</a>
	Limpopo	Mr Valmon Muller <a href="mailto:valmon.muller@eskom.co.za">valmon.muller@eskom.co.za</a> Modikoe Mokhehe <a href="mailto:modikoe.mokhehe@eskom.co.za">modikoe.mokhehe@eskom.co.za</a>
	Mpumalanga	Ms Nthabiseng Llukhozi <a href="mailto:lukhozN@eskom.co.za">lukhozN@eskom.co.za</a> ; Ms Charmaine Masehela <a href="mailto:masehec@eskom.co.za">masehec@eskom.co.za</a>
Region 4	North West	Mr Sibongo Simelane <a href="mailto:sibongo.simelane@eskom.co.za">sibongo.simelane@eskom.co.za</a>
	Kwa-Zulu Natal	Mr Ravi Moonsamy <a href="mailto:Ravi.moonsamy@eskom.co.za">Ravi.moonsamy@eskom.co.za</a>



*For office use*

Received by	
Date received	
Allocation of tracking GTX or project number	

# Eskom application form for a generator connection

## **Important information:**

**Note 1: Eskom will provide a Cost Estimate Letter within 90 days of receiving the proof of payment of the Cost Estimate Fee and the application form where connection works are at Distribution only and 120 days where initial studies indicate an upgrade of the Transmission network may be required to provide a connection. This period is however influenced by each project's complexities and may be negotiated with the customer upon establishing the dependencies and amount of initial Engineering Planning that needs to be done for each project. The following conditions should be complied with:**

- Completion in full of Part 1 of the application form ( if not applicable please indicate as such ) ;
- Reasonable assurance of the right to develop on a proposed site, e.g. letter from landowner; and
- Proof of payment of the Cost Estimate Fee (please see Cost Estimate Fees below)

**Note 2: Once the application has been submitted, Eskom may contact the customer to discuss the following:**

- where should the facility be connected;
- the requirements in terms of the supply
- grid configuration and voltages to use;
- estimated costs of connection – based on proper network configuration and equipment boundaries and details;
- grid capacity available at nearest network;
- fault levels at nearest network;
- define need to coordinate projects, determine requirements / risks for shared networks;
- any potential Eskom plans that may impact on project proposals;
- any impact (e.g. lead times) on requested timetable; and
- Eskom to determine interdependent projects in public domain (as far as possible) (liaising with EIA consultants, DEA, NERSA, etc.).

**Note 3: Eskom will request Part 2 of this application form to be filled in and proceed with a budget quotation only after the following conditions have been complied with, namely:**

Where the Independent Power Producer (IPP) intends to submit bids in a regulated IPP purchase programme:

- the entity responsible for procurement has to first pre-qualify the application.
- For IPP applications that do not intend to be part of a regulated bid programme: (See Note 4)
- a letter from NERSA indicating engagement on an application for a licence;
  - acceptance of the cost estimate conditions and the payment of the quotation fee;
  - completion of Part 2 of the application form;
  - proof of land ownership/permission to use the land obtained;
  - EIA progress, i.e. appointment of EIA consultant and confirmation from DEA approving the Scoping Report or Basic Assessment Report as may be applicable; and
  - proof of reasonable viability of the proposed technology regarding the primary energy source.

## **Environmental Requirements:**

Be aware of the fact that Statutory Approvals from all infrastructure providers and utilities are required for the building of the generation plant and associated activities, and that infrastructure traversing land needs to be protected by a servitude/s registered against the Title Deed of the affected property.

In order to expedite the customer's connection, the customer is advised to, as far as possible; integrate the environmental impact assessment (EIA) for the generation plant with the EIA for the Eskom connection assets. Please ensure to obtain separate EAs for the generation plant and Eskom assets to assist with easier transfer of servitudes, etc. to Eskom. The customer will be required to discuss the requirements and coordination of the EIA for the Eskom connection assets with Eskom, e.g. route

selection, design, evaluation and ranking of alternatives, environmental management programme (EMPr) for the construction phase(s), servitude conditions.

### **Cost Estimate Fees (2020/21 – updated annually)**

The Cost Estimate Fee (CEF) is based on the Eskom employee labour rates and estimated hours to prepare a cost estimate of a certain Maximum Export Capacity (MEC). The following categories of MEC's and fees are applicable for the provision of a CEL.

<b>CUSTOMER SUPPLY SIZE CATERGORY</b>	<b>APPLICABLE COST ESTIMATE FEE</b>
0 – 1 MVA/MW (Minor process for qualifying LV connections)	Please refer to the application form on <a href="http://www.eskom.co.za/Whatwaredoing/GAU/Pages/SmallMicro.aspx">http://www.eskom.co.za/Whatwaredoing/GAU/Pages/SmallMicro.aspx</a>
0 – 1MVA/MW (Major process)	
> 1 MVA/MW ≤10 MVA/MW (major process)	R26 052.17+VAT =R29 960.00
> 10 MVA/MW ≤50 MVA/MW (Large)	R 66 991.30 + VAT = R77 040.00
> 50 MVA/MW (Very large)	R 100 521.74 + VAT = R115 600.00
Supply (NMD/MEC) downgrades if a CEL is required	R 16 765.22 + VAT = R19 280.00
Recoverable works (Minimum charge if a CEL is required)	R 16 765.22 + VAT = R19 280.00
Short Major Process (where no CEL is issued) <sup>1</sup>	R 16 765.22 + VAT = R19 280.00

Only one CEF shall be payable for both the Facility and the supply depending on the greater of the MEC or the Notified Maximum Demand (NMD). Please note that should the application for the facility and the supply not be done simultaneously, subsequent applications by the customer will be subject to a new CEF, where applicable.

Once the customer has submitted the application form, please request an official Eskom invoice, which will have the account number against which the payment must be made and the Eskom bank account which will also be provided on the invoice.

### **Applicability of Cost Estimate Fee:**

- New applications
- Changes in supply capacity – existing customers
- Recoverable works
- When more than one engineering study is requested at one connection point

Where more than one connection option is presented or requested in one CEL, only one fee is payable. However, if the customer requests another connection alternative after the initial one, then an additional CEF is payable.

- Change in scope requested by the customer

A new Cost Estimate Letter will be required to be issued in cases where a customer requests a change in scope for a project. A Cost Estimate Fee will be payable for the new Cost Estimate Letter that is to be issued.

- Quotation fee validity period

A new Cost Estimate Fee will be payable where the quotation fee validity period has expired and a new Cost Estimate Letter is requested by the customer

<sup>1</sup> Should a project follow the short major project route (i.e. where only the BQ is issued and no CEL is issued) then the minimum CEF of R19 280 incl. VAT will be payable. This minimum fee is charged to recover the cost of producing a budget quotation. Sometimes it is not known upfront whether the project will follow the full major or the major short process. In this case the standard CEF will be payable based on the MEC of the application as if it's full major process and if the project follows the major short process, then the difference of the CEF paid and the CEF for the major short will be deducted to get the outstanding connection charge still payable.

## Part 1 – Application Form

<b>DETAILS OF APPLICANT</b>											
1. Application relationship	Developer <input type="checkbox"/> Consultant <input type="checkbox"/> Landowner <input type="checkbox"/> Other (specify): _____										
2. Full name of applicant(s) / lead developer Customer title and full first names: Customer's initials Surname/Company name  Note that if there is more than one developer, as much information as possible should be provided											
3. Identity number or Company/Close Corporation registration number											
4. Date of submission	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">2</td> <td style="width: 20px; text-align: center;">0</td> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">M</td> <td style="width: 20px; text-align: center;">M</td> <td style="width: 20px; text-align: center;">D</td> <td style="width: 20px; text-align: center;">D</td> </tr> </table>	2	0	Y	Y	M	M	D	D		
2	0	Y	Y	M	M	D	D				
5. Do you intend to submit a bid in terms of a regulated power purchase procurement process (e.g. REFIT)	YES <input type="checkbox"/> NO <input type="checkbox"/>										
6. If YES, provide the name of the programme											
7. If NO, indicate if it is for own use and/or a wheeling transaction or other	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%; text-align: center;">Intended use of energy</th> <th style="width: 30%; text-align: center;">Yes/No/Not Applicable</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Own Use only- no export</td> <td></td> </tr> <tr> <td style="text-align: center;">Own use with Export- Offset</td> <td></td> </tr> <tr> <td style="text-align: center;">Wheeling to 3<sup>rd</sup> party</td> <td></td> </tr> <tr> <td style="text-align: center;">Other (specify)</td> <td></td> </tr> </tbody> </table>	Intended use of energy	Yes/No/Not Applicable	Own Use only- no export		Own use with Export- Offset		Wheeling to 3 <sup>rd</sup> party		Other (specify)	
Intended use of energy	Yes/No/Not Applicable										
Own Use only- no export											
Own use with Export- Offset											
Wheeling to 3 <sup>rd</sup> party											
Other (specify)											
8. Address of the applicant(s) or in the case of a company or corporate body, the registered address:											
Street no.:											
Street:											
Suburb:											

	City:	
9. Postal address	P O Box:	
	City and Country:	
	Postal Code:	
10. Contact address if different from above:	Street no.:	
	Street:	
	Suburb:	
	City:	
	Postal Code:	
11. Name of contact person		
12. Phone number of contact person		
13. Alternative phone number		
14. Fax number of contact person		
15. Email of contact person		
16. Please nominate a preferred name for this project/facility.  Eskom will take this preferred name into consideration when determining the facility's station name but reserves the right to change it in order to avoid any potential for confusion with other projects or stations. Please use a single word or short name for use in databases – to avoid potential abbreviations.		
<b>GENERAL DETAILS</b>		
17. Connection point detail:	New point <input type="checkbox"/>	Existing point <input type="checkbox"/>
	Eskom <input type="checkbox"/>	Municipal supply area <input type="checkbox"/>
	Specify: _____	
18. If new point, please indicate if a supply is required?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
	If yes, specify size of supply: _____ kVA	
19. If an existing Eskom point is to be used, please provide customer account number.		
20. If existing Eskom point, will this application result in changes in supply (NMD/MEC) to existing Eskom point	YES <input type="checkbox"/>	NO <input type="checkbox"/>

	Specify NMD: _____ kVA Specify MEC: _____ kW																																												
21. Has the applicant previously had a study completed by Eskom regarding this facility?	YES <input type="checkbox"/> NO <input type="checkbox"/>																																												
22. If yes, please specify the title, date of issue and issuing department of the pre-feasibility study(s).																																													
23. Target connection date (this date will be used for connection assessment).	<table border="1"> <tr> <td>2</td> <td>0E</td> <td>Y</td> <td>Y</td> <td>M</td> <td>M</td> <td>D</td> <td>D</td> </tr> </table>	2	0E	Y	Y	M	M	D	D																																				
2	0E	Y	Y	M	M	D	D																																						
24. Provide preference in terms of construction of assets.	Eskom to construct assets <input type="checkbox"/> Negotiated self-built project transferring assets to Eskom <input type="checkbox"/> Negotiated self-built project with developer retaining ownership of assets <input type="checkbox"/> Note: Each option is subject to legislative frameworks as well as Eskom's policies as applicable from time-to-time. More information can be made available on request.																																												
<b>MAPS AND DIAGRAMS</b>																																													
25. Please indicate coordinates for on-site grid electrical connection.  Use WGS84 datum coordinates in following format: dd°mm'ss.s" (Degrees, Minutes, Seconds)	<b>On-site Generator connection point:</b> Latitude <table border="1"><tr><td>S</td><td>d</td><td>d</td><td>°</td><td>m</td><td>m</td><td>'</td><td>s</td><td>s</td><td>.</td><td>s</td></tr></table> Longitude <table border="1"><tr><td>E</td><td>d</td><td>d</td><td>°</td><td>m</td><td>m</td><td>'</td><td>s</td><td>s</td><td>.</td><td>s</td></tr></table> <b>Electrical connection point (where known):</b> Latitude <table border="1"><tr><td>S</td><td>d</td><td>d</td><td>°</td><td>m</td><td>m</td><td>'</td><td>s</td><td>s</td><td>.</td><td>s</td></tr></table> Longitude <table border="1"><tr><td>E</td><td>d</td><td>d</td><td>°</td><td>m</td><td>m</td><td>'</td><td>s</td><td>s</td><td>.</td><td>s</td></tr></table>	S	d	d	°	m	m	'	s	s	.	s	E	d	d	°	m	m	'	s	s	.	s	S	d	d	°	m	m	'	s	s	.	s	E	d	d	°	m	m	'	s	s	.	s
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E	d	d	°	m	m	'	s	s	.	s																																			
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26. Please provide reasonable assurance of the right to develop on a proposed site, e.g. letter from landowner.																																													
27. Please provide a map, with the location of the facility, and relationship to an identifiable landmark clearly marked.  Add the marked electrical connection clearly to the grid in map format and properties to be crossed – i.e. map showing IPP site, power line and substation and connection to grid layout, if available.  Indicate how many land parcels are traversed by the proposed development and associated activities (the Generation site as well as the interconnecting network). Provide the farm name(s), farm number and portion number e.g. My Farm 123/0, Your Farm 124/1 (indicate multiple farm numbers as required).	<p><i>If GIS shape files are available, that might be submitted as well (*.shp, *.shx, *.dbf, *.prj) Minimum file requirements might have to be listed.</i></p> <p>Name of map attachment (soft copy):</p>																																												



28. If known, please provide the name of the Eskom substation from which existing supply (if applicable), is taken. Alternatively provide the nearest pole number OR stand/minisub/RMU number for the cable network

## TECHNICAL DATA

1) Please indicate the required reliability of the connection	Non-firm / Single Supply <input type="checkbox"/> or Firm / Dual Supply <input type="checkbox"/>																																							
2) For a new plant, provide the fault current (MVA) contribution of the generating facility at the Point of Connection.	_____ MVA																																							
3) Existing supply point: <ul style="list-style-type: none"> <li>· For an existing load, provide the NMD (typically for co-generation)</li> <li>· If applicable, what is the new NMD as a result of this application</li> <li>· If an existing plant, what is the existing fault current contribution and what will the new fault current contribution be in MVA.</li> </ul>	Existing NMD: _____ MVA  New NMD required: _____ MVA  Existing Fault Current contribution: _____ MVA New Fault Current contribution: _____ MVA																																							
4) Please provide details of the technology type, installed capacity and MEC.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Technology</th> <th style="width: 25%;">MEC (MW)</th> <th style="width: 25%;">Installed Capacity (MW)</th> </tr> </thead> <tbody> <tr><td>Wind</td><td></td><td></td></tr> <tr><td>CSP trough</td><td></td><td></td></tr> <tr><td>CSP tower</td><td></td><td></td></tr> <tr><td>PV</td><td></td><td></td></tr> <tr><td>Concentrating PV</td><td></td><td></td></tr> <tr><td>Landfill</td><td></td><td></td></tr> <tr><td>Biomass</td><td></td><td></td></tr> <tr><td>Biogas</td><td></td><td></td></tr> <tr><td>Hydro or small Hydro</td><td></td><td></td></tr> <tr><td>Coal</td><td></td><td></td></tr> <tr><td>Gas</td><td></td><td></td></tr> <tr><td>Other (specify)</td><td></td><td></td></tr> </tbody> </table>	Technology	MEC (MW)	Installed Capacity (MW)	Wind			CSP trough			CSP tower			PV			Concentrating PV			Landfill			Biomass			Biogas			Hydro or small Hydro			Coal			Gas			Other (specify)		
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5) Provide the project phases/time lines.  Indicate short-term and long-term MEC in MW for export capacity and Load NMD in MVA import capacity. Phasing of the project e.g. phase 1 a total of 50 MW with 1 <sup>st</sup> turbine being commissioned in 2014 and final commissioning by 2016, phase 2 a total of 100 MW with 1 <sup>st</sup> turbine being commissioned in 2016 and final commissioning by 2018. This will help to determine required network capacities and highlight potential development risks.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Year</th> <th style="width: 25%;">Facility (MW)</th> <th style="width: 25%;">Load (MVA)</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Year	Facility (MW)	Load (MVA)																																				
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## Part 2 – Project Form

**Eskom will contact the customer to request this section of the application form to be completed once all the required conditions are fulfilled. This section is to be completed in order for Eskom to proceed with a Budget Quotation.**

<b>ENVIRONMENTAL INFORMATION</b>	
6) Is a waste license required and if so what is the status of the application?	
7) Is an emissions license required and if so what is the status of the application?	
8) Is an integrated water use license required and if so what is the status of the application?	
9) Are there appeals and/or legal reviews against any environmental authorisation? If so, what is the status?	
10) Does the EIA application include all associated activities including one for the power line connection to the Eskom grid? (State all listed activities applied for.)	
11) If EIA and/or other environmental authorisations (waste, water, and air quality) have been initiated, please provide name of environmental consultant.	
12) Provide proof of landowner consent, to avoid requests for duplicate quotations on same land or very close proximity.	
13) Highlight potential risks of project, e.g. wetlands, proximity to airports, mining activities, prospecting licences, etc.	

## SITE DATA

14) Has agreement been reached between the applicant and all registered landowners affected by the proposed development and associated activities?

15) Provide a site plan in an appropriate scale. This site plan should indicate:

- a) The proposed location of the connection point and associated activities, (normally at the HV bushings of the grid connected transformer)
- b) Generators
- c) Transformers
- d) Site buildings
- e) Electrical diagram of the above including any back up generators

*Name of site plan attachment (soft copy):*

16) Does your proposed development impact on any existing infrastructure such as utilities, telecommunications, rail, roads, and water? Please specify.

## PROJECT PHASES

17) Provide the updated project phases/ time lines.

Indicate short-term and long-term MEC in MW for export capacity and Load NMD in MVA import capacity. Phasing of the project e.g. phase 1 a total of 50 MW with 1<sup>st</sup> turbine being commissioned in 2014 and final commissioning by 2016, phase 2 a total of 100 MW with 1<sup>st</sup> turbine being commissioned in 2016 and final commissioning by 2018. This will help to determine required network capacities and highlight potential development risks.

Year	Facility (MW)	Load (MVA)

## CONSTRUCTION SUPPLY REQUIREMENTS

18) Provide details of construction supply requirements in kVA, voltage and location.

**Please note that a separate electrical supply application will be required in this regard.**