

	Small-Scale Embedded Generators (SSEG): Questions and Answers	Distribution
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Date: 15 June 2022

QUESTION	ANSWER
1. Is it possible to get more information about hybrid solar Photovoltaic (PV) and battery installation?	Eskom is currently working on the installation process, information will be shared at a later stage.
2. How will Eskom policy, etc. translate into municipal opportunities, processes, and costs? Is there collaboration with municipalities?	Yes, there is collaboration. Eskom is part of the German exchange programme that is currently assisting municipalities and the broader renewable industry.
3. In the case of the Medium Voltage (MV) connection, will the plate rating $\leq 75\%$ of Notified Maximum Demand (NMD) still apply?	No. An MV-connected generator does not have a cap, but it will depend on the technical evaluation of the network for that point of connection.
4. When will Eskom allow customers on shared Low Voltage (LV) networks to install grid-tied Small-Scale Embedded Generators (SSEG), for example, as the City of Cape Town does?	Shared network applications are currently dealt with on a case-by-case basis where a time-of-use (TOU) tariff is available.
5. Can I just confirm if you need to do a tariff change or an NMD upgrade? Can you add this to the SSEG application (to form one application) because currently, I must compile: - the application for electricity form - then apply for the SSEG application, even if the SSEG application form provides these changes?	Yes, currently it is a parallel process where Eskom quotes separately for an electrical load application as well as for the SSEG application.
6. What happens to banked energy on 31 March?	It is written off. Their banking only allows you to build up "credits" until 31 March each year. Any balance of credits at that point will expire and be "lost".
7. Which TOU tariffs are available for residential customers?	Eskom has submitted a tariff proposal for residential TOU to NERSA. We are still awaiting a response. In the meantime,

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	when we do allow residential customers TOU connections, this will be for their use only.
8. Why did Eskom limit the banking of energy to generators up to 1 Mega Volt Ampere (MVA)? What was the reasoning behind the 1 MVA restriction?	Banking is a very special concession we give for small plants, where we believe we can manage the network and System Operator implications. Increasing the size may have unintended consequences from a network, revenue and cash flow perspective and management of the Distribution and Transmission system.
9. When we submit applications for upgrades or tariff conversions, why can't we get both quotations so that the customer can make an informed decision to continue? Eskom forces a customer to spend money to pay for the upgrade or conversion prior to processing the SSEG application. This poses a risk that the customer might not be approved for export because Eskom takes six months or more to complete a conversion or upgrade. The risk to Eskom, should the SSEG not be approved after the upgrade or conversion is completed, is that the customer might be placed on the previous tariff. Will Eskom carry the cost?	A quotation for both can be submitted simultaneously. You must note, however, that a fee is payable for the SSEG quotation. This fee is non-refundable. So, if you decide you do not want to proceed with the project, you will not be able to claim back this fee. If you apply for the tariff change, upgrade or conversion, this work is done on the load connection side and the quotation is usually free. Eskom would, however, advise that when you submit the application for a tariff change, an upgrade, or a conversion, you clearly state that this is in response to the future connection of a generator facility. This risk remains with the applicants if they want to submit the applications for quotations in parallel (simultaneously).
10. Does Eskom allow the consolidation of five supplies and export as well? In other words, five points that will cater for all points.	Eskom has specific rules for account consolidation, and these must first be adhered to, for example, the accounts must be for the same customer class (large power or small power).

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	• Eskom has not yet opened the window for residential applications as we are currently preparing the resources that would manage this space. We may, on an ad hoc basis, allow an application to be processed if there is sufficient motivation to support it beyond the scope of the allowed window. • If a farm has small power points and large power points, unfortunately, Eskom will not be able to consolidate across the customer classes.
11. Just to confirm: I know that the application is free for a tariff change, but the client gets a quotation for the meter change, etc. Will this still apply if Eskom now installs the new meter/upgrade metering kiosk because it is an Eskom requirement, or will the client still pay for the work to be done? And why does the client have to get his electrician to switch the system on after Eskom has made the changes? Why does Eskom not make the changes? I had an NMD upgrade and Eskom made the changes but why was the customer left without power until his electrician could come out to the site?	• If the cost of the upgrade exceeds R1 million or the size of the upgrade exceeds 1 MVA, the quotation will not be free.
12. Why is SANS 10142-1-2 listed? Has it not been published?	• SSEG is not covered in the current standard SANS 10142-1 (wiring of premises for low-voltage installations) and therefore Eskom has established an EGI Report as an interim solution to include the compliance of an installation of SSEG while awaiting the publication of SANS 10142-1-2 (The Wiring of Premises – Part 1-2: Additional special requirement for low-

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	voltage, small-scale embedded generator installation connected in parallel with the normal supply).
13. What are the geographical limits for consolidation? Can you consolidate over two different stands (<i>Erfs</i>) or buildings within the same area?	• Yes, it is possible, but it will be dealt with on a case-by-case basis. There are specific rules for consolidation. The current rules for account consolidation are that accounts must be inside the same provincial boundary, on the same feeder line, in the same customer class (large power user or small power user) and under the same TOU tariff.
14. The grid-tied inverter is required to be NRS097-2-1 compliant, that is, anti-islanding and two series-connected contacts to ensure isolation from the grid. Despite this, Eskom insists on an additional lockable disconnect switch. What is the technical reason for this? This looks like complete overkill for which the customer ends up paying.	• The NRS097 document provides guidelines for the industry. However, safety considerations for Eskom's staff members, equipment, and customers also have to be considered and safety also requires a visible disconnect switch in line with Eskom's operating regulations.
15. We submitted a few applications this week and have been requested to submit a Professional Engineer (Pr Eng) letter at the application stage; we have never been requested to submit this at the application stage previously. Please confirm if this is a new requirement?	• This is the statutory requirement. The proposed SANS 10142-1-2 document will provide guidance to the industry as to any future requirements in this regard.
16. Concerning banking and wheeling, if my generator is smaller than 1 Megawatt (MW), will the buyer be allowed to bank if their NMD is larger than 1 MVA?	• Banking is not available to connections greater than 1 MVA at present.

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17. In the case of off-grid applications where there is a physical changeover, is there still a cost involved in submitting an application as it is simply to notify Eskom of the installation?	• No, there is no application process and cost charge, but the customer still has to complete the official declaration letter to confirm that the system is off-the-grid.
18. Why does Eskom insist on Pr Eng/Pr Tech installation sign-off? Will this change in the future? If yes, under which conditions?	• This is the statutory requirement. The proposed SANS 10142-1-2 document will provide guidance to the industry as to any future requirements in this regard.
19. Currently, Eskom effectively provides a “seasonal/TOU period-based net-metering” tariff system. Is this likely to change? When and why? Customers need certainty going forward.	• Tariffs are continuously being reviewed to take cognisance of industry trends and customer behaviour. • Eskom is proposing to make changes to the TOU charges and periods as the system profile has changed. This was included in the 2020 tariff plan, which was never decided on by NERSA. The same changes are being proposed for 2023 and this would impact the credit mechanism for net billing due to the changes to the rates and periods. Once Eskom has submitted to NERSA, detailed information will be provided to the public through forums and the Internet.
20. Please provide a technical explanation as to why Eskom uses the nameplate rating of the inverter to limit the size of an installation, instead of, for example, a password-locked “feed-in limit” set for the PV system as the system that the City of Cape Town applies? Eskom’s approach severely limits customers who wish to install inverters to facilitate backup capacity, for example, or who wish to plan for system expansion.	• The Eskom policy concerning the hybrid application is currently being reviewed and will be communicated to the public in due course.

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