

## ROOFTOP SOLAR PROGRAMME QUESTIONS

1. What is Rooftop Solar Programme?

It is a Programme developed as a means of creating an enabling environment for end-users to generate their own electricity through solar energy and sell excess to the Botswana Power Corporation (BPC). It also presents a suitable mechanism to facilitate private sector participation and increase the uptake of solar energy.

The Programme entails the development of Rooftop Solar Guidelines, applicable rules, regulations, standards, tariffs as well as review of processes.

2. Is it subsidized like conventional electricity?

There is no subsidy provided in the Programme. The consumer will be responsible for the full cost associated with procuring and installing the Rooftop Solar System as well as connecting the system to the grid.

3. For how long will this programme run?

The RTS Programme will run for a period of 3 years, effective November 2020; and upon its completion be evaluated for changes.

4. What is the allocated capacity of the Programme

In the first 12 months, the system-wide aggregate capacity of the Programme, which starts in November 2020, is 10 megawatts (MW). Twenty per cent (2MW) of the capacity is reserved for domestic consumers and eighty percent (8MW) for commercial and industrial consumers.

5. What is the term of the permits and the licences?

Any approved Rooftop Solar project will be given an Interconnection Agreement and/or Licence of 15 years, upon which time it will require renewal.

BPC will regularly monitor for Permits (ICA) expiring, while BERA will monitor for licenses that may be expiring.

6. Is there any application fee to be paid?

An application fee of P1000 will be paid by the potential consumer upon approval of their application

7. Why is the application fee for domestic customer the same as for commercial and industrial customers?

This is a bare minimum administrative fee and a portion for cost recovery (expenses) in facilitating the interconnection.

8. Are there any other fees to be paid during the application?

For the commercial and industrial customers applying for systems above 100kW, they will pay a licence fee over and above the application fee.

9. How can one join or be eligible?

To be eligible one has;

- i. To be a BPC consumer; have title to the Rooftop Solar System.
- ii. The system to be installed on the same property as the meter that will measure the consumption and export of the electricity;
- iii. Adhere to the limitations in capacity and sizing
- iv. Consumers should be in good standing with BPC.
- v. RTS applicants in arrears will not be considered.

10. If you are a BPC customer but renting, are you still eligible for the programme?

Yes, the tenant must produce a lease agreement as well as consent from the landlord

11. How is it beneficial to the participants?

The benefits are derived over a period of time through:

- i. savings in utility or BPC monthly bills;
- ii. realisation of income by selling excess energy to the BPC;
- iii. increased control of the energy cost by the consumer;
- iv. contribute to green economy and reduction of the effects of climate change.

12. How is the billing arrangements for various customers (domestic and C&I), how much are they paid for the excess electricity exported to BPC and when are they paid?

Consumers are billed according to the regular monthly billing cycle. Excess units of electricity (kWh) generated and exported to the grid over the consumer's use are credited towards the next billing cycle. For applicable consumers accruing demand charges, aggregate demand will be adjusted over each billing cycle for the first 12 months of the RTS system's operation.

Credits will be carried forward for a duration of 12 months, known as "banking". Upon which time, BPC will reconcile the consumer "bank" and pay the consumer for the remaining credits at the avoided cost of generation rate (wholesale cost of power) of P81.51.

The avoided cost rate, will be determined by BPC on an annual basis, as approved by BERA and advised to consumers."

13. Why is the cost for purchasing one unit (kWh) of electricity by consumers from BPC more than the cost of selling one unit of electricity by the consumer to BPC?

With the introduction of the RTS programme, the consumers have become producers or generators of electricity. BPC is now procuring electricity from them. Normally the price BPC would pay for that power/energy would be the price obtained by a competitive bid; in the absence of such a competitive bid, it is reasonable to pay the average prevailing market

prices. In addition to generation costs, the end user tariff covers overheads such as operation and maintenance costs at transmission and distribution.

14. Will I be paid the same P/kWh if I send them to the BPC grid during peak periods?  
The P/kWh during peak periods will be higher than in other periods.
15. What will be the times determined as peak hours?  
0600 – 1000 hours and 1800 – 2200 hours
16. What is avoided cost of generation rate and how is it determined?  
The “avoided costs” is the wholesale cost of power which is based on the marginal avoided costs of the internal generation units that are backed down or imports the utility reduces when there is RTS generation;  
It is determined by working out the average cost of internal generation and imports (P/kWh) on an annual basis.
17. When can one make an application?  
Applications shall be opened on the 30<sup>th</sup> November 2020, until the aggregate capacity limit of 10MW is reached. The interested consumers will apply through an online application system which can be accessed directly on the BPC website. Right of entry is on a first come-first served basis, until the aggregate capacity limit of 10MW is reached.
18. Where can one access the application forms?  
Botswana Power Corporation website
19. How will one know that they have been given approval or their application is successful?  
BPC will notify the consumer of the outcome of their application.
20. When can one start installation of the system?  
One can start installation as soon as BPC or BERA has granted you the authority to proceed with the project
21. When can the system be put into service?  
The system is eligible to be put into service upon certification. Upon Certification, the BPC representative shall sign the Certificate of Completion on behalf of BPC, deeming the interconnection agreement (ICA) as final and in effect. For those that require licensing it will be after BERA has certified the installation and issued a license.
22. Who will test the system after installation?  
The consumer and its representative Licensed Electrician, Technician or Engineer will commission the system for Certification. Upon Certification, the BPC and/or BERA representative shall sign the Certificate of Completion on behalf of BPC/BERA depending on whether the installation requires a permit or a license.

23. What is the capacity allowed for residential premises?  
Up to 35 kW of installed capacity. Additionally, the size of a system may not exceed 110% of the consumer's consumption over the 12-month period immediately preceding the date of application.
24. What is the capacity allowed for commercial or industrial premises?  
Up to 1 MW of installed capacity. Additionally, the size of a system may not exceed 110% of the consumer's consumption over the 12-month period immediately preceding the date of application.
25. Who is responsible for the procurement, installation, operation and maintenance of the RTS system?  
The consumer will be responsible for the full cost associated with procuring and installing the Rooftop Solar System as well as connecting the system to the grid.  
The consumer will engage third parties such as a licensed Electrician, Technician or Engineer to design the solar system and also be responsible for ensuring that they obtain all the applicable permits and licenses as provided for in the Guidelines,
26. Does that mean that being connected to BPC grid, any damage due to this connection is the responsibility of BPC?  
The liability will be apportioned to the party at fault for the damages to the system in accordance with the prevailing laws of the country.
27. What will happen to the applicants who fail to install in a given period of installation?  
If the consumer does not receive certification for its system within the time frame allowed, the capacity is added back into the Programme capacity available and the consumer is removed from the Registry.  
However, if the consumer requests with valid reasons, BPC may grant an extension to the deadline, in consultation with BERA.
28. Is it possible to install a system out of this programme?  
Installing a system where there is BPC grid without BPC and/or BERA approval is unlawful.
29. Will BPC verify/certify any installation even though it is not connected to the grid?  
No
30. Will BPC be willing to allow an individual to supply themselves during the day and BPC to supply them at night?  
The Programme allows one to supply themselves any time of the day, as long as their solar facility is generating.
31. What are the procedures to be followed if the consumer wishes to disconnect from the grid?  
If a consumer decides to remove or cease operation of the RTS system, BPC must be notified, and BPC must verify that the system has been physically disconnected from the grid. For projects above 100 kW, the consumer will also need to notify BERA of the discontinuance of

the Licence. Costs to remove wiring which connects the inverters with the grid will be borne by the consumer.

32. What will happen to the installations when the programme is terminated?

In the event of the Programme's termination, any RTS-approved projects will be eligible to continue to operate their RTS under the terms and conditions of the Programme for the duration of the term of their permit or licence.

33. What happens in the event the consumer relocate from the site where the system is installed?

If a transfer of ownership of a property takes place in which an RTS system is installed, the current owner will need to notify BPC of the change and the new owner will be required to sign a new ICA. For projects above 100 kW, BPC would forward the request for a Change of Ownership to BERA to amend the Licence accordingly. Alternatively, the RTS system should be disconnected and removed from the Programme.