



**Department of Public Lands and Buildings**

**Request for Information - Government Solar Development Project**

**Addendum # 2**

**Questions and Answers**

Q1. Are you able to provide any location details regarding the 40 different sites set across the island?

**A1. The Project sites have not been finalized at this time. However, the majority of the sites that are being considered as part of this RFI are Government owned rooftops dispersed throughout the Island.**

Q2. I noticed that the RFI was specific to rooftop solar. Would any consideration be given to proposing floating solar for some or most of the sites or it has to be 100%?

**A2. Please see answer A1 above.**

Q3. I also noticed that there is no mention about storage? In the RFI you mentioned the period between 6-9 being a critical period for energy cost. This would be an opportunity for a storage solution to compliment a PV installation.

**A3. While energy storage is valuable in many ways to the grid and to the potential customer, it is not something which is being considered by the Government at this time.**

Q4. Will EPC for these contracts be required to comply with recommendations laid out in "SOLAR UNDER STORM FOR POLICYMAKERS Select Best Practices for Resilient Photovoltaic Systems for Small Island Developing States"? e.g.

- Specify high-load solar PV modules (target 5,400 Pa front load rating and 4,000 Pa back load or uplift rating);
- Pitched-roof systems should only be allowed within wind zones one and two;
- Through-bolted module retention or four top-down clips per module; etc.

**A4. Solar under Storm is a valuable set of best practices that the EPC should consider for any rooftop or ground mount project in a hurricane zone but the specific wind loading requirements for this Project have not been finalized.**

Q5. Are all of the proposed sites rooftop, if so, what is the % of flat roof to pitched roof?

**A5. The Project sites have not been finalized at this time. However, the majority of the sites that are being considered as part of this RFI are Government owned rooftops dispersed throughout the Island.**

Q6. As a matter of general interest, how much of the 4.8 square km identified in the “solar PV prefeasibility study that explored the available physical space for solar PV development across Bermuda” mentioned in the RFI is ground mount and how much is roof top?

**A6. Please see answer A5 above.**

Q7. Firstly, do you need the completed attachments by 5pm today?

**A7. The most up to date RFI Timetable which contains all relevant deadlines, as well as all related information/documentation can be found on the RFI website –**

<https://www.gov.bm/procurement/government-solar-development-project>

Q8. How would this leasing / PPA agreement work within the confines of the Electricity Act 2016?

**A8. It is anticipated that any potential future Government solar procurements related to this Project specifically, would be done in aggregate and that any individual site’s installed capacity would not exceed the licensing threshold of 500kW for Distributed Generation systems, as defined under the Electricity Act 2016.**

Q9. Is the entire 7mw to be installed in one go or are you looking at a multi-year project?

**A9. If this Project were to move forward to a Request for Proposal, the Government would evaluate the completion schedule as one of the criteria for the RFP.**

Q10. Will one company do the 7mw or will there be multiple contracts awarded?

**A10. If the project moves forward under a developer financed model, then it is envisioned that one developer / investor would be awarded the project across all of the sites but with requirements to contract implementation to multiple local companies. This accomplishes three of the goals of this Project for the Government;**

- i). Economies of scale to achieve the best energy cost**
- ii). Parallel engineering and construction to accelerate the project completion schedule**
- iii). Investing in and strengthening Bermuda's existing solar industry with up to 7MW of additional installed solar capacity**

**If the Project moves forward under a Government financed model, then it is envisioned that multiple engineering, procurement and construction (EPC) contractors would be awarded the Project to spread the work across multiple local companies and to maintain an accelerated time table for Project completion.**

Q11. Will the planning applications for this project be completed simultaneously or separately?

**A11. If the Government decides to move forward to a Request for Proposal stage for this Project, all information about the Department of Planning's application process will be defined in the RFP document.**

Q12. Will these planning application fees be consolidated or treated individually?

**A12. If the Government decides to move forward to a Request for Proposal stage for this Project, all information about the Department of Planning's fees will be defined in the RFP document.**

Q13. Will the Department of Planning fees be waived for this RFP?

**A13. If the Government decides to move forward to a Request for Proposal stage of the Project all additional information related to fees etc. will be defined in the RFP document.**

**All current related Planning fees can be found at the link below;**  
<https://planning.gov.bm/wp-content/uploads/2020/05/GN401-2020-Planning-Fees.pdf>

Q14. Is this RFI/RFP open to international bidders?

**A14. This RFI is an early market engagement to acquire critical feedback from the solar financing, solar development and solar installation industries both locally and internationally.**

Q15. What building code is being referenced for this RFP?

**A15. There are no references to any building codes in this RFI, however any possible future development would be required to meet all current Bermuda Building codes at the time of construction.**

Q16. What wind load rating are the systems to be designed for?

**A16. If the Government decides to move forward to a Request for Proposal stage of the Project, all technical specifications related to the solar PV systems required will be defined in the RFP document.**

Q17. Will the Government provide as-built drawings prior to October 12 to confirm roof attachments for the specified sites in the RFP?

**A17. No. This is not a Request for Proposal but a Request for Information, an early market engagement to acquire critical feedback from the solar financing, solar development and solar installation industries both locally and internationally.**

Q18. When does the Government plan to execute this RFP and award a bidder?

**A18. The Government does not have a final timetable for the issuing or awarding of an RFP at this stage, but for purposes of pricing estimates please use April 2021 as the target RFP award date.**

Q19. When does the Government plan to have this system interconnected?

**A19. The goal is to acquire information through this RFI process from respective developers, investors and solar installation companies (EPCs). The Government does not have a final timetable at this stage, but for purposes of pricing estimates please use December 2021 as the target completion date.**

Q20. What is the target completion date?

**A20. Please see answer A19 above.**

Q21. Will the Government give preference or additional points to bids that are consolidated with financing, engineering and installation expertise in one package?

**A21. The Government has not defined any criteria for selection at this RFI stage of the Project. The goal of this RFI is to acquire information from respective developers, investors and solar installation companies (EPCs) at this stage.**

Q22. What key points/categories will the bids be evaluated on & awarded accordingly?

**A22. The Government does not have a final Timetable for the publishing, review and award of any contract under a Request for Proposal at this time, but for purposes of pricing estimates please use April 2021 as the target RFP award date.**

Q23. Buildings voltage operation : Do all the public buildings where you plan the solar systems installation operates under the same voltage configuration ? if yes, could you please precise if 480/277VAC is available for all of them ? Frequency of 60HZ?

**Q23 All buildings do not operate at the same voltage. Some are single phase and some are 3 phase, some operate at 277/480 volts and some operate at 120/208 volts. The single phase voltage is typically 120/240 volts. The frequency is 60HZ.**

Q24. Transformers capacity in each of those buildings is also an important (sic) information because the solar PV system cannot be oversized from the existing transformers' power or it might be replaced.

**A24. Thank you for this feedback. It has been noted by the Project Team.**

Q25. Regulation of photovoltaics power plants: It seems that there is a specific feed-in Tariff for eventual solar excess production measurement ...how it is measured? does that mean that a parallel distribution circuit for energy injection have to be install through a meter ? who should provide the meter? the utility, the customer or the supplier of the solar system through the local utility?

**A25. All information related to the interconnection of a Distributed Generation solar system to the local electrical network, can be found at the link below;**  
[https://www.belco.bm/attachments/2018\\_08\\_16\\_Standard\\_Contract\\_Template\\_002.pdf](https://www.belco.bm/attachments/2018_08_16_Standard_Contract_Template_002.pdf)

**All information related to the current Feed-In-Tariff rate can be found at the link below;**  
<https://www.ra.bm/documents/feed-in-tariff-fit-review-decision-order/?wpdmdl=14268&refresh=5f623e8414ea61600274052>

Q26. Could you please precise if all the publics buildings roofs considered for solar are made of concrete and flat roofs or not?

**A26. The Project sites have not been finalized at this time. However, those sites which are being considered are a mix of flat (concrete slab) and pitched 'Bermuda' rooftops (limestone or concrete slate, with wooden rafters).**

Q27. In the pdf it is said that the Government is looking for "A total of over 1,600 potential ground-mount or rooftop sites". However, in the Annex, they are asking for a price estimation only for roof top projects. Could they confirm that this RFI is only based on roof-top installed projects?

**A27. The Project sites have not been finalized at this time. However, the majority of the sites that are being considered as part of this RFI are Government owned rooftops dispersed throughout the Island.**

Q28. In the Annex, 4 different aggregated prices are required. The facilities' average size is from 133 to 160kW.

- 2MW at 15 locations -> Avg: 133kW
- 4MW at 30 locations -> Avg: 133kW
- 6MW at 40 locations -> Avg: 150kW
- 8MW at 50 locations -> Avg: 160kW

It would be helpful knowing the minimum and maximum sizes as well, meaning the smallest and the biggest installation in that aggregated group.

**A28. The maximum installed capacity for an individual site is 500kW. The minimum capacity is 50kW. This is anticipated across all categories (a-d) above.**

Q29. As the RFI is quite open, could the following assumptions be considered? If not, please, provide the correct assumption.

**A29.**

- All installations are installed in rooftop. **The majority of the sites that are being considered as part of this RFI are Government owned rooftops dispersed throughout the Island.**
- Facilities would be interconnected at LV. So, LV-MV transformer is not included. **Yes**
- Facilities would consider string inverters. **Yes**
- Inverters would be installed in the same rooftop. **One option is on the roof / another would be in an existing dedicated air-conditioned electrical room within the facility.**
- The maximum distance to POI would be 200ft. **Yes**

Q30. Are you planning on having 40 projects at the same time? What is the timeline for the installations you have projected?

**A30. The goal is to acquire information through this RFI process from respective developers, investors and solar installation companies (EPCs). The Govt does not have a final timetable at this stage, but for purposes of pricing estimates please use December 2021 as the target completion date for all 40 projects.**

Q31. When is the intended date for the actual RFP for these projects?

**A31. The goal is to acquire information through this RFI process from respective developers, investors and solar installation companies (EPCs). The Government does not have a final timetable at this stage, but for purposes of pricing estimates please use April 2021 as the target RFP award date.**

Q32. Are there any specific taxes or taxes exemptions for the products and/or works related to this type of installations?

**A32. Currently all solar photovoltaic systems and components can be imported duty free under the *Bermuda Customs Tariff 2020 - End Use Duty Relief CPC4226 Goods for Renewable Energy Systems*.**

Q33. Are there any permitting expenses related to these projects?

**A33. All current related Planning permitting fees can be found at the link below;**  
<https://planning.gov.bm/wp-content/uploads/2020/05/GN401-2020-Planning-Fees.pdf>

**If the Government decides to move forward to a Request for Proposal stage of the Project all additional information related to fees etc. will be defined in the RFP document.**