Minutes of pre-bid conference
proposal for
Provision and installation of solar power for Lagodekhi Business Service Yard

*Due to the technical issue that arose during the Pre-bid meeting (April 14, 2021) for the UNDP Tender RFP for the Provision and installation of solar power for Lagodekhi Business Service Yard, project decided to postpone it for April 15, 2021.

Date: 15-April-2021, 12:00 p.m.
Via Zoom Platform

UNDP Project: Improving Rural Development in Georgia
Ms. Natia Gobejishvili (Coordinator for Environment)
Ms. Liliana Gureshidze (Liaising and Administrative Assistant)
Mr. Zaal Kheladze

Attendees:
Rapid Solutions Georgia LLC
Mr. Ali Aykut
Mr. Felipe Limin

Solar
Mr. Levan Koakhidze

Stepsolar
Mr. Zurab Salaridze

Key Information
The representative of the project, Ms. Natia Gobejishvili, gave a brief presentation of:
• Project background
• Purpose of the Tender

**Key objective**
The project set the target to promote Energy Efficiency/Renewable Energy technologies at rural areas and reduce the pressure on Forest Resources. To demonstrate the benefits of renewable Energy technologies, the project is supporting LEPL National Forestry Agency with the provision of solar power as a primary source of power while having diesel Generators as a back-up power source.
UNDP wishes to obtain quotations from qualified contractors with experience of provision of Solar Power.
Q and A session:

1. There is no Civil Scope mentioned in the RFQ but a civil engineer is noted as a requirement in the RFQ. Could you please give civil scope of work details?
   - Due to the fact that conceptual project is presented in the tender, drawings are necessary which is the scope of civil engineer.

2. How will the cables installed between the Distribution Boards and other equipment? Direct burried or on cable trays?
   - It is the responsibility of the selected company.

3. What is the length of cable route from Technical Room to Cottage?
   - Not more than 15 meters’

4. Who will carry out the excavation work for cable installation?
   - Selected company, if necessary

5. If excavation is required: Is the area soil or rocky? Are there concrete foundations or roads on the cable route to be excavated?
   - The area is mainly soil, however the company needs to define where to install the cables. If there will be support necessary from governmental institutions for necessary excavations, the National Forestry Agency will support the selected company.

6. If excavation is required please give cable trench and cable installation details (such as depth of the trench, requirement of cable protection tiles, sand and warning tape)?
   - Cable trench and cable installation details should be defined by the selected company.

7. Main Power cables are shown as non-armoured. Is that correct?
   - Yes

8. Is the cottage existing at this location? If you mean Business Service Yard, yes, it is already constructed.

9. Is the bridge existing on the irrigation channel? And are the cables to be installed on the bridge using a cable tray?
   - There is no need of crossing the bridge for the installation works.
   - The presented project is conceptual. In order to perform the work, the bidder has to make working drawings confirmed with accredited expertise.
   - BoQ differentiates prices for products, transportation and installation.
   - The location of the technical room is determined in agreement with the National Forestry Agency. The technical room is planned to be located no further than 10-15 meters from the cottage.

10. Will DBK, generator, Battery Bank and ATS be in the technical room container?
    - Yes
11. Will DB be in the Cottage?
No.
This can be placed in a technical container too.

12. 12.1) 23 LED lights are shown at the cottage. Will they be recessed or surface mount?
12.2) Is there a suspended ceiling in this building?
This work is not required to be completed by the winning company.
See answer to point 9

13. On earthing detail (page-14) why 2 different orientation was shown for the main earthing grid? (one of them is a triangle orientation and the other one is a straight line using 3 earth electrodes)
The question is not clear for the technical team.
Please specify.

14. On the layout (Page-15) 9 x outdoor lighting poles with double light fittings shown. But in the bill of materials there are only 2 numbers lighting poles.
14.1 Will it be 9 or 2 sets?
14.2 On the layout (Page-27) 2 lights were shown on each pole. Will it be 2 lights or 1 light per each pole?
Only 2 per 2 lamps per pole

15. As per the DB SLD (Page-16), Total installed load is 13675 Watts. But on the same page, consumption from the solar system is shown as 7675 Watts.
15.1) Why there is 6000 Watts difference?
15.2) Will the technical room loads not supplied from the solar system & ATS?
Please follow the BOQ provided in the RFQ and answer only those questions related to the purchase and installation of uninterruptible power supply.

16. Solar Panels capacity is not clear.
- On Page-21, Solar panels quantity is shown as 10 x 5 = 50 pcs and this makes 20 kW.
- On Page-37 pricing table, solar system capacity is shown as 4kW
Which one is correct?
Please advise what is the total load to be supplied from the Solar System?
See the answer in paragraph 15

17. As per the DBK SLD (Page-17) Total load is calculated as 6000 Watts. But total load is 2920 Watts. Is this correct?
See the answer in paragraph 15

18. For all socket lines 30mA RCDs (Residual Circuit Breaker) + MCB or 30mA RCBOs to be used. These are missing on the SLD drawings and Bill of Materials. Could you please confirm?
Internal network is not a task of RFQ
For single phase supply 2 pole (Phase + Neutral) circuit breakers and three phase supply 4 pole (3 Phase + Neutral) circuit breakers are recommended. Could you please confirm?

5 pieces of solar panel sets are visible in the system layout (Page-10) (10 pieces set), but we see 1 set of solar panels (450W 10 Pcs) in the price table. A 10 kW PV inverter (Page-37) has been selected for a system with an approximate value of 4 kWp. We think this inverter choice is big for this system. For a set of approximately 4 kWp, choosing an inverter of maximum 4kW is suitable for effective production.

If we know the load, we can choose the solar panel quantity and suitable system components. Please confirm.

Can we recommend different brands for the inverter group and batteries? Yes, the important note is that the required parameters should not be worsened.

We do not install the solar panels as shown on Page-18. This arrangement will cause a shadow and this will reduce the performance of the solar panels.

Our proposal is to install them in vertical arrangement of 2 x 5. Below you can see the installation method for one of our installations as an example. In this arrangement, the front is open, without shadows. Concrete foundation will be installed, as written in the specification.

Could you please confirm?

On Page 18 the Solar PV panel power shown as 400W and on page 37 it is noted as 450W.

It is possible to propose your offer.

If the expectation is 400 W and above, it is easier to find and we may have a few choices about the brand. If 450 W is requested (there are also panels of this value, but a limited brand and model, we may even have difficulty finding stock)

Is it possible to use 400W instead of
24. On Page-21 an HVAC condenser unit inverter is shown. What is this for?

This is not a subject of RFQ.

25. Is there any specific requirement for the technical room to be 10m2 or suitable standard container is acceptable?

No. You can determine by yourself based on the gauges of your own machines.

26. We believe that a detailed design is required as many technical issues need to be confirmed and design modifications required. Could you please confirm if detailed design for power distribution and solar system needs to be included in the pricing for all the bidders?

Confirmed. It is necessary to provide detailed drawings recognized by an accredited expertise.

27. We need soft (word file extension) copy of the Tender document as we need to click or tap some boxes in order to enter text messages as response.

Will be provided.

28. Do we need to price the Tender thru the provided MTO (without changing it) or we need to amend the provided MTO?

Please follow the BOQ provided in the bidding documents and answer only those questions related to the purchase and installation of uninterruptible power supply.

29. What should be the share ratio between Solar power and the generator?

Solar power share should be 4 kW. The hitting system will be guaranteed by consuming the biomass products. As the presented project is conceptual, to perform the work, the bidder has to make working drawings confirmed with accredited expertise. We would advise visiting the site for more clear understanding of the tasks.

30. What is the expectation from Solar power? As we are limited in the Solar panels and batteries, is it correct understanding that mostly the generator will provide energy supply and the Solar power will be an asset?

The main purpose is to provide electricity supply for computers and the office building with solar power. According to the demand from the NFA, mostly generators will provide energy supply.

31. Would you consider extending the deadline as the time is very squeezed and more time is needed to elaborate bid with the realistic prices?

Please note that if we do not receive a sufficient number of bids by the set deadline, we will extend it. Moreover, you will be informed by the project of any changes in the announced tender. At this stage, as per UNDP rules and regulations, we aren’t able to apply any revision to the set deadline.

32. As the project is conceptual, can we elaborate our statement of works that

Please refer to the announced BOQ.
might have been different from the announced one that might require different BoQ?

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(Coordinator for Environment)

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(Liaising and Administrative Assistant)

Mr. Zaal Kheladze  
(Engineer)