

**RFP No. PAKIS/RFP/23/023**

**SUPPLY AND DELIVERY OF SOLAR POWER EQUIPMENT IN PAKISTAN**

**QUESTIONS & ANSWERS**

*28 June 2023*

1. For TOI part, it mentions vendor will be responsible for transportation, food, and accommodation. Could you please specify what are these for? Are they cost for the trainee? If so, please provide the trainee address and list so we can take it into consideration during preparation.

**Answer**

Selected bidder, responsible for TOI, will be responsible for transportation, food, and accommodation i.e., TA/DA and/or DSA for their staff and trainers. They will not be responsible for transportation, food, and accommodation i.e., TA/DA and/or DSA for the trainees. UNHCR will later provide the trainee list and details, to the selected bidder once required.

2. Company ABC is our trading company on behalf of the manufacturer XYZ. Is it acceptable if we use ABC company as the bidding company while using the parent company's qualification certificate like ISO certificate and previous performance?

**Answer**

In this scenario, we will only accept documents such as experience, end user certificates (of the same product family) and quality assurance certifications of manufacturers (i.e. XYZ) of the equipment. Please note that the manufacturing company must be relevant (manufacturer) to the solar equipment. The same shall be mentioned in the respective profiles. Please refer to the RFP document and its annexes. The relation between the two companies shall be duly mentioned on the letterhead(s).

However, the financial capacity of the bidding company (only) (ABC) will be evaluated.

3. For hybrid inverter, do you need it to provide electricity to the power grid? Is there any electricity statistics (requirements for electricity meters)?

**Answer**

Yes, the hybrid inverters must be on grid-hybrid inverters. We cannot provide statistics on electricity meters at this time. However, we are planning that all the installations shall be as per the Pakistan grid requirements so that the installed systems shall be connected to the national grid for providing any access generation to the grid. All grid-connected inverters shall comply to the requirements of IEEE 1547 or UL 1741 or equivalent recommended by the AEDB Pakistan.

4. For Inverter DC input rated voltage, the battery voltage requirement is 48V, while there is usually higher voltage requirement for the matching battery for 30KW/50KW inverter. How to make it feasible? Will it be fixed by the consignee through battery parallel or other methods?

**Answer**

For 30/50 kVA three-phase hybrid inverters, total energy storage requirement is approximately 1,000 kWh. To keep the system modular, we recommend a maximum capacity of 25 kWh per battery bank.

Considering this energy requirement, vendor can propose appropriate voltage for the battery bank. Accordingly, changes have been reflected in RFP document and financial offer form. The changes have been summarized in RFP Addendum No. 1 dated 27-Jun-2023.

It is pertinent to reiterate that vendor shall be responsible for quoting compatible products. Once the energy assessment is completed, UNHCR will share the details with successful bidder for procuring optimum system and solutions for sustainable energy access.

5. We noticed that in section 2.4.3, it is requested to provide quotations with DAP delivery to Islamabad, Peshawar, and Quetta. However, in ANNEX-C, the DAP location is only specified for Quetta and Peshawar. Is it possible that there is a missing DAP delivery location for Islamabad?

**Answer**

All items will either be delivered to UNHCR Warehouse in Quetta or in Azakhel, District Nowshera (while Peshawar is nearby major city). No warehouse exists in Islamabad. Please follow the financial offer form available as Annex C.

6. Furthermore, we observed in the section 2.4.1 that random testing is required to be conducted at UNHCR warehouses in Quetta, Azakhel, and Nowshera. However, Azakhel and Nowshera are both located in the KPK province, and they are not among the three locations listed in 2.4.3. Please clarify the locations regarding random testing and delivery locations.

**Answer**

Same answer as question 5 i.e., all items will be delivered to UNHCR Warehouse in Quetta and in UNHCR warehouse in Azakhel, District Nowshera (while Peshawar is nearby major city). Please follow the **REVISED** financial offer form and quantities mentioned in Annex C.

7. Regarding the bidding process: Due to the restriction on the maximum file size of 10MB for uploaded bid documents, some supporting documents contain a significant number of images, causing the file size to exceed 10MB. Compressing the files would result in a reduction in resolution. In this case, is it allowed to divide the technical bid into several files, each not exceeding 10MB, for uploading to the e-tender box?

**Answer**

Please refer to section 2.6 of the RFP document. Annex-G of the RFP provides guidelines on registration for e-TenderBox, while Annex-H useful information as the supplier user manual. Bidders are requested to thoroughly study the RFP document and all its annexes. As per Annex-H *"The system can handle multiple uploads. Uploading speed depends on the size of the files. There should be at least one file uploaded under either 'Technical' or 'Financial' category before clicking on the 'Save & Submit' button."* Hence you can divide your offer into multiple sub-files, each less than the 10MB size limit.

8. Could you please provide the configurations for each system, which will enable us to make the selection of suitable off-grid hybrid inverters, batteries, and PV modules to ensure seamless compatibility and optimal performance as a complete system?

**Answer**

We cannot provide the configuration as the energy assessment is in progress. The inverters shall be on-grid hybrid (not off-grid hybrid) and all the equipment provided shall be compatible for avoiding any integration issues. Bidders are welcomed to provide additional information about compatibility and optimal performance as a complete system. Once the energy assessments are complete and equipment supplier(s) have been selected, UNHCR will reach

out to the selected supplier(s) to discuss optimal selection of equipment before placing the PO.

9. Tender requirement is Hybrid inverter. Is Feedback to grid needed? Usually kVA means Off-Grid+ Solar Charger/Controller?

**Answer**

Please refer to question 3 - the hybrid inverters must be ongrid-hybrid inverters as feedback to grid is required. We are planning that all the installations shall be as per the Pakistan grid requirements so that the installed systems shall be connected to the national grid for providing any access generation to the grid.

10. IEEE or UL is Split - Phase. This is North American standard. Is it necessary? If so why is it required for equipment to be deployed in Pakistan?

**Answer**

IEEE 1547 or UL 1741 standards are recommended for grid-connected inverters by AEDB/ Government of Pakistan.

11. Is it confirmed that both Single Phase and Three Phase are needed?

**Answer**

Yes, both Single-phase and Three-phase inverters are required as per the details provided in the RFP and its annexes.

12. Certification: IEEE is Split Phase, which is exclusively a North American standard. Is it necessary? If so, why is it required for equipment to be deployed in Pakistan?

**Answer**

Please refer to the answer to Question No. 10. IEEE 1547 or UL 1741 are not specific to North America and are recommended by AEDB/ Government of Pakistan for the grid-connected inverters.

13. From the tender document we see that number of Hybrid Inverters and Batteries required are as follows:

**Hybrid Inverter**

1.5 kVA, 1-Phase:	250 units
2.10 kVA, 3-Phase:	20 units
3.15 kVA, 3-Phase:	20 units
4.30 kVA, 3-Phase:	15 units
5.50 kVA, 3-Phase:	20 units

**Batteries:**

1. 4.8 kWh:	300 units
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2. 9.6 kWh: 130 units

While considering the total number of solar panels of 6,482 each delivering 540 W for total power capacity of 3,500 kW, installed at different locations, we would like to know whether the number of Hybrid Inverters and Batteries as indicated above are all that's required for the instant project, or their number may vary according to the power generated at each site?

How are these inverters and batteries distributed in relation to the number of panels, as specified?

30, 50 KVA Inverters:

- a. The mentioned battery voltage of 48 V is normally not compatible/ recommended with higher capacity inverters. The battery voltage is higher, which results in lower battery sizes and higher reliability.

5, 10, 15 KVA Inverters:

- a. Keeping in view the UNHCR requirements and keeping in view that the systems will be installed in remote areas also, reliability/ long term operation has a lot of importance. Different manufacturers have different solutions for battery systems keeping in view the reliability/ compatibility of the systems.

In order to ensure reliability of the products/ systems, we suggest as follows:

Each battery has its own BMS system which comes with different coding and is normally not compatible with Inverters of other brands. It is suggested to please identify the number of batteries required for each Inverter separately.

Manufacturers should be allowed to propose their own solution, as long as they fulfill the system requirements of UNHCR.

### **Answer**

We cannot provide the complete system configuration as the energy assessment is in progress. The number of equipment specified in this RFP are estimated based on available site details. Bidders are welcomed to provide additional information about compatibility and optimal performance as a complete system. Once the energy assessments are complete and equipment supplier(s) have been selected, UNHCR will reach out to the selected supplier(s) to discuss optimal selection of equipment before placing the PO.

For 30/50 kVA inverters, total energy storage requirement is 1,000 kWh. To keep the system modular, we recommend a maximum capacity of 25 kWh per battery bank. Considering this energy requirement, vendor can propose appropriate voltage for the battery bank. Accordingly, changes have been reflected in RFP document and financial offer form. Estimated number of batteries to be connected to each inverter have also been added. These changes have been summarized in RFP Addendum No. 1 dated 27-Jun-2023.

The Bidder is responsible for quoting compatible products/ brands. It is also pertinent to mention that provided numbers to be followed in the bid and multiple smaller units instead of large unit will not be acceptable e.g., quoting two (02) 5 kVA inverters instead of one (01) 10 kVA will not be acceptable as part of the RFP evaluation. UNHCR will exclusively reach out to the selected supplier to discuss optimal selection of equipment before placing the PO.

## **PRE-BID MEETING QUESTIONS AND ANSWER**

Please refer to the below questions discussed in Pre-Bid meeting on 22<sup>st</sup> June 2023.

14. 30 and 50 KVA Inverter These Inverters are usually high voltage inverters and or not compatible with low voltage batteries i.e., 48V. Batteries are costly due to high voltage requirement. Higher inverter rating higher the cost of batteries, mostly used for industrial practices. If any residential or commercial system is 30KVA common practice is the combination of 15+15 =30 KVA.

5,10,15 KVA Inverters Compatible with 48V batteries, each battery with its own BMS System BMS Configuration/Settings for 5KVA Inverters are different then 10KVA Inverters even voltages are same i.e., 48V, therefore its requested specify the 5KVA,10KVA, 15KVA Systems with specific number of batteries.

### **Answer**

Please refer to the answers to Questions 4 & 13. Number of batteries for each type of inverter have been added. For 30/50 kVA inverters, total energy storage requirement is 1,000 kWh with a maximum capacity of 25 kWh per battery bank.

15. Taking into account that the vendor is responsible, among other details, of integration between components, does it include the design and sizing of cables and protection elements (like PV Box, Earthing, etc.)?

### **Answer**

No, the bidders are not responsible for this. Integration among the given equipment (batteries, inverters, and solar panels) is responsibility of the selected vendor. We would appreciate if the vendor can provide additional information about the design and sizing of cables and protection elements, recommended with their system. The same will be discussed during equipment selection with the selected supplier(s) and Training of Installers.

16. Need clarification for joint venture that has a local contractor, we can JV with local distributor where local distributor will be the distributor of international manufacturer.

### **Answer**

Roles and responsibilities of manufacturers and local representatives are clearly mentioned in the RFP document and its annexes. The joint venture with clear roles and responsibilities (as per the RFP) shall be duly declared on letterhead on the ventured bodies.

17. Can we go 48V 100 AH x 2 batteries, as requirement is 48V 100Ah?

### **Answer**

Please follow the numbers provided in the RFP and refer to the details provided in the RFP document and its annexes.

18. Is technical proposal is prepared in hard then scan and submit in tender box is it correct

### **Answer**

Yes, this is correct. All document (part of the bid) shall be scanned and submitted on the e-tendering box.

19. Regarding trainings: the audience will be installers OR communities together?

**Answer**

The audiences will be mainly installers, UNHCR staff but may include other stakeholders including the local communities. Final list of trainees along with trainees will be shared by UNHCR with the successful bidder in due course.

20. Bidder is responsible for designing and installation or just supply to designated place only.

**Answer**

No, this is a supply bid. Successful bidder is responsible only for supply of the equipment mentioned in the RFP and not for design and/or installation.

21. Could you please explain the way of parallel connection between inverters? Does it mean paralleling at the Grid point only?

**Answer**

The inverters will be required to operate in parallel to supply the load and feedback to the grid.

22. What will be the minimum order quantity?

**Answer**

This is a frame agreement. The year-wise estimated quantities are mentioned in the RFP document. Please note that the quantities may increase/decrease based upon availability of funding.

23. Will give order to one single party or can hire 3 different vendors for panels, inverters, and batteries?

**Answer**

One bidder will be selected for supplying the equipment to avoid any technical integration and related issues.

24. If a company is registered as a vendor from last 2 years and didn't receive a project, then new vendor registration is compulsory or not?

**Answer**

New vendor registration form is compulsory for bidders who are not registered with UNHCR.

25. You mentioned that UNHCR may award frame with two years, if it means that we need to keep the price with 2 years, no change?

**Answer**

Yes, the prices will be valid for (2+1) years. Prices will not change during this period.

26. For the financial, as we just set up two years, if it's ok to offer one- or two-years financial report.

**Answer**

Please refer to the technical criteria in the RFP document. As long as you meet the requirements, you can submit.

27. Will installation be contracted individually by each location, or a new global bid process is planned?

**Answer**

There will be a separate RFP for installation.

28. The last one is, for the Tier 1, we're like to do that, but need the times, if no this report at moment, does that mean that we couldn't offer the bidder?

**Answer**

All the documents available on the deadline of submission of proposals. Any document(s) expected in future will not be considered for scoring during the technical evaluation. we'll be evaluating the bids based on the technical specifications, if you meet technical specifications currently, you can submit the bid.

29. 48V Batteries might not be compatible 30KVA and 50KVA Inverters. Higher the inverter rating higher the voltage of batteries.

**Answer**

Please refer to the answers to Questions 4 & 13, 14.

30. Can u please mention the minimum order quantity for a single batch order? How can u facilitate in LC opening problem.

**Answer**

We expect that the ordered quantity; especially for Year 2023 will be supplied in a single batch as we would like to start the installation process as soon as possible. The minimum batch order may vary as per the actual requirements.

Regarding the L/C concern, please find below the import instructions and modalities at the bottom of this document.

31. We can provide all three, but we may not be official distributor of manufacturer for all three components panels, inverters, and batteries.

**Answer**

Roles and responsibilities of manufacturers and local representatives are clearly mentioned in the RFP document and its annexes. In this case, each product certifications (given in the mandatory and technical criteria) will be separately evaluated. The bidder can submit experience of the manufacturer(s) as part of the technical proposal. However, financial capacity of the distributor (not the manufacturer) will be evaluated, as UNHCR will issue a PO

to the distributor, if successful. UNHCR will facilitate in import of these items as per the details provided in the RFP and at the below mentioned section of roles and responsibilities.

UNHCR will not be responsible for communication with the manufacturers. The local representative will be responsible for aftersales services, warranties, integration issues, and Training of installers.

## ROLES AND RESPONSIBILITIES WITH REGARD TO DUTIES, TAXES AND PAYMENTS

### Advance payment and Issuance of Letter of Credit

UNHCR will not pay in advance and do not issue a letter of credit (L/C) to its suppliers, instead UNHCR issues a purchase order (PO) along with its general terms and conditions which becomes a legal contract (between UNHCR and Supplier).

For the clearance of UNHCR shipment from port of discharge, UNHCR is exempted for the procedures usually required for the commercial importers means EIF form, and L/C requirements are waived by customs authorities for United Nations shipments.

### Roles and Procedures concerning duties and taxes exemption (to avail UN privileges and immunities in respect of DAP prices)

UNHCR can only avail the duties and taxes exemptions upon import if the shipment is consigned in the name of UNHCR-Pakistan. However, after clearance of the goods at post, it will be the responsibility of local distributor to transport goods to the destinations. Therefore, the principal supplier/manufacturer must decide with its partner within Pakistan for inland transportation of goods, and all other services mentioned in the RFP document.

UNHCR could not transfer or avail the privileges and immunities (duties/taxes exemption) if the supplier within Pakistan imports or have already imported the goods by himself. In this situation, UNHCR may only provide exemption for GST applicable on the invoice generated by the local supplier registered with tax authorities within Pakistan. This is further explained with below scenarios.

**Primary bidder: The bidder who will submit the bid to UNHCR will be considered as “Primary Bidder”. It could be a local distributor or international principal / manufacturer. Therefore, the future Frame Agreement / PO (if selected) shall be issued to the primary bidder.**

### If Primary Bidder is a local Distributor

If a primary bidder is based within Pakistan and its principal supplier(s) or manufacturer(s) are outside Pakistan. In this scenario, the Frame Agreement and subsequent Purchase Order (PO/Contract) would be signed between UNHCR and the primary bidder within Pakistan.

Upon completion of responsibilities as per PO, the payment shall be made to primary bidder based in Pakistan in PKR by converting the USD value into PKR as per prevailing rate at the time of payment.



To avail the import duties/taxes exemptions, the primary bidder must agree with its principal supplier/manufacturer that the principal suppliers shall ship the goods in the name of UNHCR mentioning UNHCR as consignee.

**If Primary Bidder is an International Supplier / Manufacturer**

If a primary bidder is an international manufacturer / principal supplier which is based outside Pakistan and nominates its local authorized partner based in Pakistan, the Frame Agreement and subsequent Purchase Order(s) (PO/Contract) would be signed between UNHCR and the primary bidder outside Pakistan.

The primary bidder outside Pakistan shall issue shipping documents in the name of UNHCR and UNHCR shall provide exemption certificate against import duties and taxes for the shipment.

Upon clearance the local supplier shall further arrange delivery up to intended location and further responsibilities as advised in PO/by UNHCR/principal supplier outside Pakistan.

28 June 2023

Prosper Dunia Mumanya

Senior Supply Officer

UNHCR Pakistan