Bid Title: Electrification at Bhasanchar of Noakhali District

Sl No	Sources	Questions	Clarification
		BIDDING DOCUMENTS VOLUME_1	
1)	**Section III- Evaluation and Qualification Criteria (Without prequalification)** Page 56-60 of Vol_1	Note: Substantial completion shall be based on 80% or mere Plant and installation completed under the contract. This note is application for 4.2a (i), 4.2a (i), 4.2b and 4.2c?	**Clarification:** This definition (Substantial completion) shall apply wherever the term *"**Substantially** Completed"* is used in the document, specifically under Clauses 4.2(a)(i), and 4.2(c).
2)	**Request for Bids Technical Evaluation Form 1.4** page77	1. Availability Commitment (%) 2.Soiling Loss Forecast & Cleaning Strategy 3.Proposed Warranty & Performance Guarantees	**Clarification:** Detailed proposal is required. 1. Specify the expected availability for each system component (PV array, BESS, DG). Mention any design or operational measures to ensure this (redundancy, maintenance strategy). 2. Provide an estimate of average soiling loss (%) based. Then describe the cleaning schedule, methods (manual, automated, frequency), and any tools used to keep panels clean and maintain performance. Clearly state the warranty terms for PV modules, inverters, BESS, DG, and related equipment. Include performance guarantees such as minimum power output or efficiency over a certain time, and remedies if guarantees are not met.
3)	**Schedules of Rates and Price** Page 120-138 of Vol_1	Schedule No. 4-Installation and Other Services (Items 2 to 9) In the event that civil and structural components such as the Approach Road, Boundary Wall, Water Supply System, Prefabricated Control Roam Building, Foundation Modules, Diesel Storage Tank, Watch Tower, etc., are prefabricated and supplied from abroad as permanent materials and	**Clarification:** For Price Schedules No. 1, 2, 3, and 4 — The items described under each Schedule shall be strictly maintained. Any deviation, omission, or alteration from the prescribed format or item list may result in disqualification of the Bidder. Note: The Bid Price under Schedule No. 1 shall include Advance Income Tax (AIT). All other Price Schedules shall be

		equipment, please confirm that these items will also fall under the same PCC Clause 14 provision that is, BPDB will pay all applicable import VAT, customs duties, and supplementary duties at the port of entry. while the Contractor's quoted prices for these items shall remain on a CIP Chittagong basis, exclusive of such import levies.	duly filled in strictly in accordance with the Price Schedule forms provided in Volume 1 of the Bidding Document.
4)	**Experience Criteria requirement**	Relaxation on Specific Experience in PV Power Plant Projects	**Clarification:** As per bid document
5)	**Manufacturar Authorization** ITB 11.2 Page 41_Vol_1	Is it possible to submit the Scanning Paper, E-mail copy, Faxed copy of the MAF.	**Clarification:** As per bid document
6)	**European efficiency** Page 64_Vol 1	Inverter refers in value Addition Technology and Plant Warranty table is for PV inverter or PCS?	**Clarification:** PV inverter
7)	**Additional Documents of Technical Part** Section-II BDS Page-40 ITB 11.2 of Vol_1	The Bidder shall submit the following additional documents in the technical Part with its Bid. Code of Conduct for Contractor's Personnel (ES) (Required for evaluation purpose Management Strategies and Implementation Plans (MSIP) to manage the (US) risks 33Environmental Management System (EMS)Implementation Plan (Required for evaluation purposes). Shall each of the IV members provide these documents?	**Clarification:** As per bid document
8)	**Sustainable Procurement Proposal** Page 83 of Vol_1	The bidder finds an additional sustainable procurement requirement are needed and provides no proposal, will this be considered as non-responsive.	**Clarification:** The proposal concerns how the bidder will meet the sustainable procurement requirements in the bidding documents. Offering extra sustainability measures is optional and not including them will not make the bid non-responsive, as long as all mandatory requirements are fulfilled.

9)	**ITB 19.1** **Bid validity period-210 days** Page 42 of Vol_1	Tender documents show this project will be lump-sum basis without any price adjustment However the Bid validity period for evaluation at least 210 days from the bid submission deadline which is too long and gives the huge risk of material/equipment price increase since the Middle East and Europe New Energy Market has huge demand, further to that, the bid evaluation period cross the Bangladesh Ere Period which falls more unstable in all respects. Please reduce the Bid validity and evolution period up to 90 days prior to the erection event or apply the policy for price adjustment.	**Clarification:** As per bid document
10)	**Sub-Factor 3.1 (Financial Capabilities:** **Each JV partner must submit audited (or acceptable) financial statements for the last three years to prove financial soundness and long-term profitability**. Page 54 of Vol_1	Due to recent global economic crises that have weakened many companies' financial positions, and since all JV members are jointly liable to the Employer, it is requested to relax the financial criteria under Sub-Factor 3.1. Specifically, the requirement that each JV partner must meet the financial capability criteria should be amended to allow at least one partner to meet the requirement, enabling wider participation of both local and international bidders.	**Clarification:** As per bid document
11)	**Value Addition Technology and Plant Warranty offered by the Bidders table** Page-64 of Vol_1	**Solar PV Module** Efficiency C 22.5-23 %, B 23.01-23.5 %, C Above 23.5%. On the premise of meeting project requirements and functions, considering that the capex investment of the project is more economical, it is recommended not to limit the efficiency of PV panels too high because the mass production is limited and the price may high.	**Clarification:** As per bid document

		So, advice: Efficiency C 22.0-22.5%, B 22.51-23.09 %, C Above 23.1%.	
12)	**Bid Security** Page 23 of Vol_1	If a Bid Security is specified pursuant to ITB 20.1, the Bid security shall be a demand guarantee in any of the following forms at the Bidder's option: (a) an unconditional guarantee issued by a bank or non-bank financial institution (such as an insurance, bonding or surety company); (b) an irrevocable letter of credit; (c) a cashier's or certified check; or (d) another security indicated in the BDS, from a reputable source from an eligible country. If an unconditional guarantee is issued by a non-bank financial institution located outside the Employer's Country the issuing non-bank financial institution shall have a correspondent financial institution located in the Employer's Country to make it enforceable unless the Employer has agreed in writing, prior to Bid submission, that a correspondent financial institution is not required. In the case of a bank guarantee, the Bid Security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, or in another substantially similar format approved by the Employer prior to Bid submission. The Bid Security shall be valid for twenty-eight (28) days beyond the original date of expiry of the	**Clarification:** As per bid document

		Bid validity, or beyond any extended date if requested under ITB 19.2. As bidder outside the employer's country, the compliance of bid security has been one of our major concerns. We are intended to directly issue our bid security in the form of bank guarantee using the Bid Security Form included in Section IV from our bank based in our country as guarantor, and the bid security-bank guarantee thereafter shall be advised to the beneficiary (the employer) by an advising party in the employer's country. Could you please kindly clarify to us whether we can provide bid security in this way or we need to reissue our bid security through a correspondent bank in the employer's country?	
13)	**Methodology**	Please describe the requirements under the methodology section.	**Clarification:** The methodology should describe the proposed approach for design, procurement, construction, testing, and commissioning of the Solar PV and BESS system, including quality, safety, and schedule management very precisely.
BIDDING DOCUMENTS VOLUME_2 & 3			
14)	**Location of PV plant**	Could you precisely provide the location and the distance from the photovoltaic plant area to the 11KV medium-voltage substation?	**Clarification:** The 11-kV medium-voltage substation shall be located inside the project boundary. The exact location and distance will be determined and fixed as per the approved design layout.
15)	**Workers permission related**	If installation workers or construction equipment/materials need to be brought onto the island, does the contractor arrange the timing themselves, or is a permit required each time?	**Clarification:** The mobilization of installation personnel, equipment, and materials to the island shall be subject to approval by the concerned Authority, with all required permits obtained accordingly. BPDB shall provide necessary assistance in this regard.

16)	**HVAC of BESS** Vol_2 Page 45	HVAC shall be distributed and each battery cluster shall be configured with an independent air conditioner. BESS shall have pack level optimization function which means each battery pack should have a pack optimizer, which is in parallel with battery pack. BESS shall have rack level optimization function which means each battery rack should have a rack controller, which is in series with the battery rack.	**Clarification:** As per bid document.
17)	**Electrical networking security** Vol_2 Page 46	**Electrical networking security:** The electrical networking system from the battery compartment to the PCS shall uses a dual-level electrical system architecture consisting of a DC/DC converter and a DC/AC bidirectional converter. The DC/DC converter isolates batteries from power grid faults. Avoid thermal runaway caused by external electrical factors such as power grid faults and high voltage pass-through.	**Clarification:** As per bid document.
18)	**Leveling of PV Module Area**	**Leveling of PV Module Area**	**Clarification:** For leveling of the PV plant area up to FGL, the existing soil may be used. However, for the construction of control building, main & internal perimeter roads, switch yard etc., suitable fill material shall be provided as per the design specifications. Note: The lowest point of the PV module, at a tilt angle of 15°, shall be at least 1500 mm above the Finished Ground Level (FGL)
19)	**Documentation of PV Inverter** Page 39 of Vol_2	**Documentation:** PV Inverter utility grid approval certificate requires, please specify more about this certificate that will require from OEM or utility owner?	**Clarification:** Both (OEM or utility owner) are accepted.

20)	**PCS Electrical safety** Page 41	Electrical safety: IEC 62109 (1&2), EN 50178 or equivalent The PCS complies with IEC 62477, which covers the electrical safety requirements equivalent to IEC 62109/EN 50178. Kindly confirm whether this certification is acceptable.	**Clarification:** As per bid document Note: Equivalent of mentioned IEC will be acceptable.
21)	**Reliability test standard of Inverter** Page- 39	IEC 62093 is mainly applicable to PV modules. For PCS, the equivalent environmental reliability requirements are covered through IEC 60068 series tests. Please confirm if IEC 60068 can be accepted as equivalent for this project.	**Clarification:** As per bid document. Note: As there is equivalent mentioned in the bid document.
22)	**Degree of Protection of PCS**	The PCS is designed with IP65 protection. We would like to clarify if IP65 can be accepted for this project requirement, or if customization to IP66 is mandatory.	**Clarification:** As per bid document
23)	**Container Door Open alarm for BMS** Page-46	This function is not included in the current standard design. However, it can be implemented if required, and a deviation item may be added accordingly.	**Clarification:** As per bid document.
24)	**PCS and MVS integrated solution**	The PCS and MVS are integrated into one unit. Therefore, the kVA rating of the transformer is determined by the PCS output capacity, rather than a standalone transformer rating. The combined PCS-MVS unit provides optimized design and compact layout, ensuring reliable performance and compliance with system operation requirements.	**Clarification:** The proposed configuration, in which the PCS and MVS are integrated into a single unit, is acceptable.
25)	**Mobilization of materials**	Currently, only military vessels are permitted to approach the islands. If awarded the contract, would the transportation of goods be restricted solely to military vessels? Should civilian vessels be permitted to approach the islands, what formalities would be required?	**Clarification:** The mobilization of equipment and materials to the island shall be subject to approval by the concerned Authority, with all required permits obtained accordingly. BPDB shall provide necessary assistance in this regard.
26)	**Warehouse**	Which part in the island can be use as a warehouse? Is it free or do we need to pay?	**Clarification:** Bidders are free to propose their design. Payment: Bidders' responsibility if applicable.

27)	**Water for construction**	Is water for construction purposes free of charge or subject to a fee?	**Clarification:** Bidders' responsibility
28)	**Water detection and linkage protection** Page 45 of Vol_2	Water detection and linkage protection function shall be configured, when water flood occur, the power circuit is cut off in time to avoid electric shock, high voltage short circuit, and short circuit spread. Currently, the PCS does not include a water detection and linkage protection function. Please advise whether this function is mandatory, or if alternative protective measures may be considered.	**Clarification:** As per bid document
29)	**Roads** ➢ **Approach road** ➢ **Main road** ➢ **Internal road** ➢ **Perimeter road**	1. Width of Main Road is minimum 6m mentioned in tender document (2.11.20 Civil Works, Page No.: 183, Volume 02 of 03). 2. As per 2.5.3, Page No.: 16, Volume 02 of 03, "The Plant will be protected by a perimeter wall". But as per 2.11.20 CIVIL WORKS, Page No.: 185 (Gate and Security Fence), Volume 02 of 03, "A longitudinal fence is used to control access to the site Security fences shall be a hot-dip galvanized chain link steel fence with commando type round barbed wire as over-climb protection". Now which one is to be considered, either Brick masonry wall with RCC Frame or Chain link steel fence? 3. As per 2.5.5 Roads and Pathways Page No.: 17, Volume 02 of 03, it is mentioned that all main road and perimeter road shall be at least 0.5m high from the FGL. On the other hand, it is mentioned that all internal roads shall be at least 0.25m high from the FGL. Now it is requested	**Clarification:** 1. As per bid document (approach road required, minimum width- 4 meter) 2. As per bid document (Gate and Security Fence, Page No.: 185) 3. As per bid document (See definition of main roads and internal road of Page 183 of Vol_2) 4. As per bid document (Bidders should propose insulators complying with applicable international standards.)

		to consider from your end that, all roads (main road, perimeter road and internal road) shall be at least 0.25m high from the FGL. 4.GTP of insulator	
30)	**BESS**	Is that ok if we do consider the augmentation to meet the BESS technical requirement for long life of 20 years?	**Clarification:** As per bid document (There is no consideration of BESS Augmentation.)
31)	**GTP of BESS**	According to ESS GTP, liquid cooling or air cooling has been required whereas according to volume 2-2.11.5 clause page number 46 required only for liquid cooling. In that case which one we should consider?	**Clarification:** Consider anyone of liquid cooling or air cooling
32)	**Request for Bids and Prices Schedule of Rates Distribution System as per BPDBs' Standard** page130	Please provide detailed information on the installation locations of each transformer, which will be beneficial for the initial line planning.	**Clarification:** As per the bidder's proposal which will be later approved by BPDB.
33)	**Part2: Section VII: Employer's Requirements** **2. Specification** **1. Detailed Survey** **Part2 Section** **VII Employer's Requirements page 99**	Is it the responsibility of the employer to acquire the land for the utility poles? The project involves land occupation and logging. Who will bear the costs? Is there a rough list of users who are involved in the compensation? What is the approximate range of the compensation amount?	**Clarification:** BPDB shall provide necessary assistance in this regard.

34)	**2.5.5 Roads and Pathways** page-16	Main road, perimeter road and internal roads shall be designed for a life of thirty (30) years. What is difference between main road and internal road?	**Clarification:** Main roads will connect all buildings, switchyard, BESS and transformer stations, and all other main elements of the Facility and will have a minimum width of 6m. Internal road will connect the PV field with the main roads and will have a minimum width of 3m.
35)	**2.11.20 CIVIL WORKS** page-183	Geotechnical study If our design is using pile foundations instead of expand foundations, can we perform CPT instead of SPT?	**Clarification:** As per bidder's preference
36)	**2.11.20 CIVIL WORKS**	Pls clarify if there are requirements for BESS container foundation?	**Clarification:** RCC Mat foundation is required for BESS container foundation.
37)	**2.11.20 CIVIL WORKS** page-199 & 202	Control room cum Administrative Building Control Building In which building should we accommodate BMS and EMS equipment? Or should we build another building for BMS and EMS equipment?	**Clarification:** Should have separate infrastructure for BESS. **Note**: It shall be ensured that BESS must be placed on a raised platform of minimum **1.5 meter from FGL.**
38)	**GTP of transformer** Page-9 of Vol_3	Porcelain, outdoors type with arcing horns of standard gap, mounted on top of tank. Quantity 3 Nos This parameter deviates from our standard design. A deviation item can be formally added if required Please confirm whether this approach is acceptable	**Clarification:** As per bid document
39)	**PV mounting connectors**	Section 2.11.2 of the tender document states that PV mounting connectors (nuts, bolts, washers, locking washers, etc.) should be made of stainless steel or hot-dip galvanized corrosion protection. However, the same section also specifies that all nuts, bolts, and fasteners should be high-quality stainless steel (SS304 grade). Which requirement takes precedence?	**Clarification:** Hot-dip galvanized steel/Zinc-al-Mg/Zn-Al or equivalent can be used.

40)	**PV mounting structures and foundations**	Section 2.11.2 states that PV mounting structures and foundations should have a survivability of at least 20 years, while Section 2.11.20 requires a design service life of at least 25 years for all civil works. What is the required design service life for: ➤ PV mounting structures? ➤ PV mounting foundations? Other civil works excluding PV mounting structures and foundations?	**Clarification:** PV mounting foundations for 25 years
41)	**Coating of mounting structures**	Section 2.11.2 specifies a minimum zinc coating thickness of 120 microns for PV mounting structures. Considering the relatively thin wall thickness of the structures, achieving 120 microns is challenging. Is it acceptable to use aluminum-magnesium zinc coating with equivalent corrosion resistance?	**Clarification:** The minimum Zn-Al-Mg coating with equivalent coating thickness 120 microns is acceptable as an alternative.
42)	**Bearing Capacity of Pile**	In the table "BEARING CAPACITY OF PILE FROM THE SPT VALUE & SOIL TEST DATA" of the "Soil Test Report - Bhasanchar 10MW", have the shaft resistance (Fs, MPa) and end-bearing resistance (Fb, MPa) already incorporated a safety factor of F.S = 3.0?	**Clarification:** Safety factor depends upon soil investigation report.
43)	**Designed service life**	The tender documents and BNBC code only provide a 50-year return period basic wind speed, with no conversion formula for different return periods. Since the PV mounting structures are designed for a 25-year service life: Should the design use the 50-year or 25-year return period wind speed?	**Clarification:** Minimum requirement is 50 years returned period as per BNBC.

		If the 25-year return period is acceptable, please provide the conversion formula or coefficient between 25-year and 50-year return periods.	
44)	**Pole positions**	Provide the route and pole positions for the distribution lines.	**Clarification:** As per as approved as-built design prior to installation.

Note:

- As per ITB 22.1, Every submission have to give the electronic copy of the Bid – Technical Part only in pdf & **editable format** in a memory stick/ pen-drive with copying provision. In addition, technical specifications (GTP) in tabular form of each product shall be in **MS Excel** separately for comparison purpose.
- Bidders are requested to follow the sequences mentioned below:
  1. Table of contents
  2. Company profile/JV
  3. Qualification table as per provided table in the document with relevant attachments & proof (Page 49-60):
  4. Audit report summary in a nutshell and reports
  5. Experiences with relevant proof
  6. Manufacturer Authorization for 6 items (Page 41 of Vol_1)
  7. Minimum Criteria to be meet by the manufacturers (page 62 of Vol_1) with relevant proof
  8. Evaluation of Technical part (Page 63 of Vol_1)
  9. Technical Proposal (72 of Vol_1)
  10. Technical evaluation form 1.1 to form 3.3 (Page 75-77)
  11. GTP
  12. others