

NED UNIVERSITY OF ENGINEERING & TECHNOLOGY PROCUREMENT CELL

Phone # 99261261-68, (Ext. 2471 & 2501) Fax # 99261255, e-mail: dp@neduet.edu.pk
"Say No to Corruption"



Director Procurement

No. DP/Cos-145950/Solar/8008/ 2,236 October 26, 2021

Notice Inviting Tender

The Assignment

Sealed Bids based on "Single Stage-Two Envelope Procedure" are invited from the Manufacturers / Authorized Dealers / Distributors / Suppliers registered with Income Tax, GST and SRB for the following work:

Brief Scope of Work

Design, Supply, Installation, Testing and Commissioning of Solar System with the Capacity of 100kWp Solar Power Solution on Main and Circulation Library at NED University of Engineering and Technology, Karachi.

Method

The bids shall comprise a single package containing two separate envelops. Each envelop shall contain separately the "Financial Proposal" and the "Technical Proposal". Tender Documents can be purchased from ADP-II office & shall be opened as per below schedule in same office. Bid Security 5% of bid price which should be placed in Financial Proposal.

Eligibility:

- a) The bidder should have experience in design, manufacture, supply, Installation and commissioning on-grid solar solutions in Pakistan and must have required licenses by regulatory authorities including AEDB and K Electric for the work.
- b) Details of turn-over (Including in terms of Rupees) of at least last three years that Average turn-over of at least last three years should not be less than Rs 22 million, as per online annual returns submitted to FBR.
- c) Valid Professional Tax Certificate issued from Government of Sindh. Valid Certification with AEDB for On-grid and hybrid renewal energy installations of capacity upto 1000 KW – Category ARE-VI
- d) Registration with (FBR) Sales Tax Department and Sindh Revenue Board (SRB).

	Tender Schedule	Tender Fee Rs		
Issue	/ Sale	Submission Opening		
From	То	Submission	Opening	
02.11.2021	23.11.2021	24.11.2021 10:00 A.M.	24.11.2021 10:30 A.M.	2000/-

Tender fee in shape of pay order would be in favor of Director Finance, NEDUET. Bidding documents can also be obtained and shall be submitted in the office of ADP – II as per above schedule. Bidders are requested to give their Best and Final Price as "No Negotiations" is permitted. Bidding Documents containing detailed terms and conditions are available at Websites www.neduet.edu.pk and www.neduet.edu.pk and www.neduet.edu.pk

26.10/20

ISSUED ON:	 _	
ISSUED TO: _		



"Design, Supply, Installation, Testing and Commissioning of Solar System with the Capacity of 100kWp Solar Power Solution on Main and Circulation Library at NED University of Engineering and Technology, Karachi

TENDER NO. PC/NED/DWS/SOLAR/8008/2021

Procurement Cell

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Director Procurement

Introduction

Project Outline

NED University of Engineering & Technology is one of the leading University of Pakistan which providing quality education and reaching its centennial year of celebrations in year 2021. NED University of Engineering & Technology in line with its commitment towards "Carbon Neutrality" is thriving to encourage the use of Renewable / Green energy within its sphere of influence. The university in its ambition of cleaner and greener Pakistan has decided to opt for solar energy to meet its electrical requirement. With this ambition, NED University has decided to solarize the main (Lat: 24°55'57.59"N, Long: 67° 6'42.50"E) and circulation library (Lat: 24°55'59.83"N, Long: 67° 6'41.04"E). The location of both buildings is shown in Fig. 1.



Figure 1: Top view and location of the project - NED University

The available maximum area of both buildings is 1025.16 m2 and 892.7m2 as shown in Figure 2 and 3. Please note that the net effective area will be less because of some shading effects.



Fig. 2: Total Area of Main Library



Figure 2: Total Area of Circulation Library

INSTRUCTION TO BIDDERS

i Source of Funds

The relevant heads of accounts Budget of NED University of Engineering & Technology. The eligible payment under the contract is to be made from this approved budget allocation.

ii Eligible Bidders

- a This Invitation for Bids is open to all firms, manufacturers, contractors, suppliers and services providers etc. from eligible source as defined in the SPP Rules, 2010 (as amended to-date) and its Bidding Documents except as provided hereinafter.
- b Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Procuring agency to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods / jobs to be purchased under this Invitation for Bids.
- c Government-owned enterprises in the Province of Sindh may participate only if they are legally and financially autonomous, if they operate under commercial law, and if they are not a dependent agency of the Government of Sindh.
- d Bidders shall not be eligible to bid if they are under a declaration of ineligibility for corrupt and fraudulent practices issued by the any government organization.

iii Eligible Goods and Services

- a The origin of all the goods & related services to be supplied under the Contract should be mentioned.
- b Origin means the place where the goods are mint, grown or produced or the place from which the related services are supplied.
- c The Origin of goods and services is distinct from the nationality of bidders.

iv Cost of Bidding

a The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Procuring agency named in the Bid Data Sheet, hereinafter referred to as "the Procuring agency," will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

The Bidding Documents

- v Content of Bidding Documents
- a The bidding documents include:
 - (a) Introduction
 - (b) Instructions to Bidders (ITB)
 - (c) Bid Evaluation Criteria, Conditions and Process
 - (d) Bid Data Sheet
 - (e) General Conditions of Contract (GCC)
 - (f) Special Conditions of Contract (SCC)
 - (g) Schedule of Requirements
 - (i) Technical Specifications
 - (i) Annexures
 - (k) Bid Form and Price Schedules
 - (l) Bid Security Form
 - (m) Contract Form
 - (n) Performance Security Form
 - (o) Bill of Quantities & Specifications
 - (q) Integrity Form
- The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or to submit a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in the rejection of its bid.
- vi Clarification of Bidding Documents

An interested Bidder requiring any clarification of the bidding documents may notify the Procuring agency in writing. The Procuring agency will respond in writing to any request for clarification of the bidding documents which it receives no later than five calendar days prior to the deadline for the submission of bids prescribed in the Bid Data Sheet. Written copies of the Procuring agency's response (including an explanation of the query but without identifying the source of inquiry) will be sent to all interested bidders that have received the bidding documents.

- vii Amendment of Bidding Documents
- a at any time prior to the deadline for submission of bids, the Procuring agency, for any reason, whether at its own initiative or in response to a clarification requested by a interested Bidder, may modify the bidding documents by amendment.
- b All interested bidders that have received the bidding documents will be notified of the amendment in writing, and will be binding on them.
- c in order to allow interested bidders reasonable time in which to take the amendment into account in preparing their bids, the Procuring agency, at its discretion, may extend the deadline for the submission of bids.

Preparation of Bids

1. Scope

1.1 The NED University of Engineering & Technology, Karachi intends the subject procurement through method of National Competitive Bidding via Single Stage Two Envelope Procedure as per SPPRA Rules-2010 (as Amended upto-date).

2. Language of Bid

- 2.1 The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Procuring agency shall be written in the English language.
- 3. Documents Comprising the Bid
- 3.1 The bid prepared by the Bidder shall comprise the following components:
 - a) Price Schedule completed in accordance with ITB Clauses 4. 5 and 6.
 - b) bid security furnished in accordance with ITB Clause-9.

4. Bid Prices

- 4.1 The Bidder shall indicate on the appropriate Price Schedule the unit prices (where applicable) and total bid price of the goods it proposes to supply under the contract.
- 4.2 The prices shall be quoted on delivery to consignee's end inclusive of all federal and provincial taxes, stamps duties, levies, fees and installation and integration charges imposed till the delivery location specified in the schedule of Requirements. No separate payment shall be made of the any incidental services and/or on account of taxes and duties etc.
- 4.3 Prices quoted by the by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account, unless otherwise specified in the Bid Data Sheet.
- 4.4 Prices shall be quoted in Pak Rupees unless otherwise specified in the Bid Data Sheet.

5. Bid Form

- 5.1 The Bidder shall complete the Bid Form and the appropriate Price Schedule furnished in the bidding documents, indicating the goods to be supplied, a brief description of the goods, and their country of origin, quantity, and prices.
- 6. Bid Currencies
- 6.1 Prices Shall be quoted in Pak Rupees only.
- 7. Bidder's Eligibility
- 7.1 As defined in Bid Data Sheet.

8. Documents
Establishing
Goods'
Eligibility
and
Conformity
to Bidding
Documents

8.1 The documents evidence of conformity of the goods and services to the bidding documents may be in the form of literature, drawings, and Data, and shall consist of:

- (a) a detailed description of the essential technical and performance characteristics of the goods;
- (b) the Bidder shall note that standards for workmanship, material ,and equipment, as well as references to brand names or catalogue numbers designated by the Procuring agency in its Technical Specification are intended to be descriptive only and not restrictive :till stated otherwise in Technical Specifications or Bid Data Sheet .The Bidder may substitute alternative standards, brand names , and /or catalogue numbers in its bid , provided that demonstrates to the Procuring agency's satisfaction that the substitutions ensure substantial equivalence to those designated in the in the Technical Specifications

9. Bid Security

- 9.1 The bid security @ 5% of the total bid cost in favor of "Director Finance, NEDUET, Karachi" in the form of Deposit at Call or Pay Order or Demand Draft or a Bank Guarantee issued by a scheduled bank in Pakistan in original and valid for a period of 28 days beyond the Bid validity date. The bid security shall be denominated in the currency of the bid.
- 9.2 bid security shall released to the unsuccessful bidders once the contract has been signed with the successful bidder or the validity period has expired.
- 9.3 The successful Bidder's bid security shall be discharged upon the Bidder signing the contract, and furnishing the performance security.
- 9.4 The bid security shall be forfeited in following circumstances:
 - a) A bidder requests to withdraw his or its bid after opening but within the bid validity period
 - b) Successful bidder fails to furnish performance security
 - c) Successful bidder fails to sign the contract
 - d) A bidder does not accept the correction of the quoted amount following the correction of arithmetic errors
 - e) A bidder has been found black listed by any agency of Federal or Provincial Government.

10. Period of Validity of Bids

10.1 Bids shall remain valid for 90 Days the period specified in the Bid Data Sheet after the date of bid opening prescribed by the Procuring agency. A bid valid for a shorter period shall be rejected by the Procuring agency as non responsive.

10.2 In exceptional circumstances, the Procuring agency may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The bid security shall also be suitable extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required not be required nor per mitted to modify its bid.

11. Format and Signing of Bid

- 11.1 The Bidder shall prepare an original one copy of the bid indicated in the Bid Data Sheet, clearly marking each "ORIGINAL BID" as appropriate. In the event of any discrepancy between them, the original shall govern.
- 11.2 The original bid shall be shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the contract.
- 11.3 Any interlineations, erasures, or overwriting shall be valid only if they are initialed by the person or persons signing the bid.

Submission of Bids

12. Sealing and Marking of Bids

2.1 Bids must be received in a sealed envelope, complete in all respects and are to be delivered by hand or through registered mail to: Director Procurement, NEDUET Karachi, not later than dated as [notified in the NIT] and be clearly marked "Tender for Investment in Design, Supply, Installation, Testing and Commissioning of Solar System with the Capacity of 100kWp Solar Power Solution on Main and Circulation Library at NED University of Engineering and Technology, Karachi".

The Bidder shall seal the original bid in envelope, duly marking the envelope as "ORIGINAL BID". The envelope shall then be sealed in an outer envelope. The inner and outer envelope shall be addressed to the Procuring agency at the address given in the Bidding Data Sheet. The name of contract and mailing address of the Applicant shall be clearly marked on the top left corner of the envelope.

The Bids shall be prepared in English language. Information provided in in any other language shall be accomplished by its translation in English. All documents annexed in this tender are required to be filled properly, completely and accurately. Bidders seeking any clarification or advice can contact the office of Director Procurement in working hours. NEDUET reserves the right to disqualify any bid if the bidder has failed to follow the instruction provided in this tender or have submitted any false or misleading information.

- 12.2 If the outer envelope is not sealed and marked as required, the Procuring agency shall assume no responsibility for the bid's misplacement or premature opening.
- 13. Deadline for Submission of Bids
- 13.1 Bids must be received by the Procuring agency at the address specified in Bid Data Sheet, not later than the time and date specified in Bid Data Sheet.
- 13.2 The Procuring agency may, at its discretion, extend this deadline for the submission of bids by amending the bidding documents, in such case all rights and obligations of the Procuring agency and bidders previously subject to the deadline will thereafter be subject to the deadline.
- 14. Late Bids
- 14.1 Any bid received by the Procuring agency after the deadline for submission of bids prescribes by the Procuring agency shall be rejected and returned unopened to the Bidder.

15. Modification 15.1 and Withdrawal of Bids

- 5.1 The Bidder may modify or withdraw its bid after the bid's submission, provided that written notice of the modification, including substitution or withdrawal of the bids, is received by the Procuring agency prior to the deadline prescribed for submission of bids.
- 15.2 No bid may be modified after the deadline for submission of bids.
- 15.3 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiry of the period of bid validity withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security.

Bid Evaluation Criteria, Conditions and Process.

1. Procedure for submission of Bids

Bids are to be submitted in a single sealed envelope which will contain two separate sealed envelopes that are to be clearly marked as "FINANCIAL PROPOSAL" and "TECHNICAL PROPOSAL" in bold and legible letters and should contain relevant documents. Initially, only the envelop marked "TECHNICAL PROPOSAL" shall be opened; envelope marked as "FINANCIAL PROPOSAL" shall be retained in the custody of the Procuring Agency (NED) without being opened; Procuring Agency shall evaluate the technical proposal in a manner prescribed in advance, with reference to the price and reject any proposal which does not conform to the specified requirements; no amendments in the technical proposal shall be permitted during the technical evaluation; financial proposals of technically qualified bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance; financial proposal of bids found technically nonresponsive shall be returned un-opened to the respective bidders; and bid found to be the most advantageous evaluated or best evaluated as per bidding documents shall be accepted.

Bids are to be furnished and delivered either by hand or through registered mail to the office of the Director Procurement at Main Campus, NEDUET Karachi as notified in the NIT.

2. **Envelope Marking**

In the center of the envelope

Tender for: "Design, Supply, Installation, Testing and Commissioning of Solar System with the Capacity of 100kWp Solar Power Solution on Main and Circulation Library at NED University of Engineering and Technology, Karachi"

On top left corner of the envelope Bidder name and contact details

3. **Project Location**

Main and Circulation Library at Main Campus, NEDUET Karachi.

4. Land / Available space

Details of the available space has been mentioned in the introduction (Project outline).

5. Roof testing report and Soil Test report

To be arranged by the bidder at his own cost, if required.

6. **O&M (Operation & Maintenance)**

Bidder will train the staff how to carry out the operation and maintenance of the system.

7. Currency of offer

Only in Pakistani Rupees.

8. Project Commissioning Schedule

Project of minimum 100KWp has to be commissioned within 6-months of signing of contract agreement.

9. Payment Terms

Prescribed Sales Tax Invoice, payment of Stamp Duty at rate specified by Government of Sindh, Valid Professional Tax Certificate and Job Completion / Inspection Certificate duly issued by Indenting Department will be required for payment. However, withholding of all government taxes shall apply as rates specified in relevant Government Schedule. Part-Payment (Running Bills) is allowed on recommendation of the Indenting Department.

10. Evaluation of Bid

All Bids shall be evaluated in accordance with the evaluation criteria and other terms and conditions set forth in the bidding documents. Further, Bids will also be evaluated in a manner that brings "value of money" to the organization. Evaluation will be based on criteria mentioned in the bidding documents.

11. Subletting of work

The contractor will be solely responsible for carrying out the entire work in the purview of the contract. Contractor has the right to hire third parties or sublet complete or part of the work however this will have no effect on the liability of the contractor.

Contractor to be liable for all payment to his workers/ Employees

The contractor shall be liable for payment of all wages and other benefits, such as leave with wages, contributory provident fund, bonus, free medical aid etc. to his employees and labor as per the statutory requirements as in force or, may be applicable, from time to time during the contract period.

The contractor shall bear all liabilities for employee and labor retained by him as regards to their employment, litigation and any other action arising out of operation of this contract or at the termination/completion of this contract.

NED will not be responsible to pay any additional amount on any such account whatsoever.

13. NED not liable to pay compensation

The Contractor shall have no claim against the comply for any business loss, idle charges, compensation upon failure, delay, omission etc. on the part of the NED to carry out any or all the provisions of the contract for any reason whatsoever, The NED's decision in the matter shall be final and binding on the Contractor.

14. Protection of Work

During the progress of the work the Contractor shall keep the premises occupied by him in a neat and clean condition and

free from accumulation of rubbish. On the completion of any portion of work, the Contractor shall promptly remove all his equipment, temporary structures and surplus materials not to be used at or near the same location during later stages of the work. Upon completion of the work and before final payment is made, the Contractor shall at his own cost and expense, satisfactorily dispose of or remove from the vicinity of the work and from all other land made available to him by NED: all equipment, temporary structures, buildings, rubbish, unused material and any other items and materials etc. belonging to him and used under his direction for the execution of the contract and shall leave the premises in a neat and clean condition. In the event of his failure to do so. the same may be removed and disposed off by the NED at the Contractor expenses. Cabling layout plan along with equipment installed design must be shared before implementing.

15 Security Clearance

Successful bidder will obtain security clearance from all applicable relevant authorities / agencies at the earliest.

16. Co-ordination and inspection of work

The co-ordination and inspection of the day-to-day work under the contract shall be the responsibility of the contractor.

Daily work that has to be completed as per original plan will be shared with NED authorities and any change thereof will be intimated to NED for necessary permission.

17. Work on Weekly Day of Rest and Holiday

Subject to the compliance of legal provisions and various laws applicable, and conditions of service of workmen for carrying out work on the weekly day of rest and other holidays. As project being turnkey, all responsibility etc. rest on contractor.

18. Materials to be supplied by contractor.

The Contractor shall procure and provide from his own source and at his own cost materials, tools, tackles, equipment, stores materials etc., required for the execution and completion of the works.

19. Contractor's office at site

The Contractor shall provide and maintain an office at the site. Such office shall be opened during working hours/ at all reasonable hours to receive instruction, notices and / or other communications etc. on its behalf from NED. The location of the office shall be provided by NED.

20. Safety, Sanitary & Medical facilities.

The contractor and/or his sub-contractor and their employees, at Contractor's cost, shall fully comply with the safety rules, regulations or statutory direction and provide conduct, security, sanitary and medical facilities, prescribed by law or as may from time to time be prescribed by the NED with the object of securing the safety and health of the employees and

the local community. In case of violation or non-observance of any of the aforesaid provisions by the Contractor the same shall be the responsibility of the contractor alone.

The contractor shall be responsible for the safety and discipline of his employees in all phases of the work and shall provide at his cost and enforce the use of safety belts, safety boots, guards, helmets, goggles and other safety devices etc that may be required by the Acts & Rules and regulation for the time being in force, or will come in force during the pendency of contract.

First aid facilities and supplies as required by the rules for the time being in force or will come in force in near future shall be kept on the work site by the Contractor at his cost. Medical check-ups of employees/ persons working with the contractor, as required under the rules, shall be undertaken by the Contractor at his cost.

21. Contractor's subordinate staff and their conduct.

The contractor shall have the sole and exclusive responsibility for supervision of the work by qualified executives. The work shall be executed by the Contractor with his best skill, and. supervision. The Contractor shall also employ and engage to the satisfaction of the NED sufficient and qualified staff to execute and supervise the execution of the works, in such) manner as will ensure work of the best quality and expeditious working. Whenever in the opinion of the NED additional and sufficiently qualified supervisory staff is considered necessary, they shall be employed by the Contractor without additional charge on account thereof. The Contractor shall ensure to the satisfaction of the NED that sub-contractor, if any, provide competent and efficient supervision, over the work entrusted to them.

The Contractor shall be responsible for' the proper conduct and behavior of all the staff, and shall exercise a proper degree of control over them and in particular' and without prejudice to the aforesaid generally the Contractor shall be bound to prohibit and prevent any employees from trespassing or acting any way detrimental or prejudicial to the interest of the community or of the properties or, occupiers of lands and properties in the neighborhood and in the event of such employee so trespassing, the Contractor shall be responsible thereof and relive the NED of all) consequent claims or actions for damages or injury or any other grounds, whatsoever.

22. Prevention

The Contractor shall take all reasonable precautions to prevent fire in the vicinity of his/its operations, and shall be liable for all damage losses or injury from fires directly or

indirectly to his/its own operations or the activities of his employees or his sub- contractors or their employees.

23. Compliance In Respect of Various Acts

The Contractor shall at his own cost, observe, perform and comply with the provisions of the Acts applicable during the execution of the Contract, and Rules/Bye-laws framed there under as applicable to this work and shall maintain such registers and documents, as are required under the various statutes, for production of the same before the NED and/or other Statutory Authorities prescribed in this behalf, as and when required. Non-compliance of the provisions/stipulations of the Acts and rules made there under will render the Contractor liable to payment of necessary compensation/penalty, as deemed fit by statutory authorities.

It will be the sole responsibility of the Contractor to ensure all sorts of payments to his workers and submissions of returns in time, as) required by various Statutory Authorities concerned. In case of default by the Contractor in making statutory payments in time, NED reserves the right to deduct necessary amount from the Contractor's bills towards such payments. Without prejudice to the rights & remedies of the NED.

The Contractor should obtain all requisite licenses as early as possible on award of work and preferably prior to commencement of work so to avoid any breach of law.

All persons other than his regular employees engaged by the Contractor in connection with the performance of the contract shall be deemed as his employees for purposes of payment/remuneration employees and no claim shall lie against the NED in respect of delay, deduction and non-payment of wages and/or remuneration/compensation by the Contractor to them.

24. Compensation and liability

Insurance shall be affected by the contractor at his cost for all the contractors' employees and persons engaged in the performance of the contract. If any of the work is sublet the contractor shall require the sub- contractor to provide for workman's compensation and employer's liability insurance for the latter's employees if such employees are not covered under the Contractor's insurance.

The NED shall not be liable for or in respect of any damages or compensation payable as per law in respect of or in consequence of any accident or injury to any workman or other person in the employment of the contractor or any of

his sub-contractor or third party etc. and the Contractor shall indemnify and keep indemnified the NED against all such injury, damages and compensation and against all claims, demands, proceedings, costs, charges and expenses, whatsoever in respect of or in relation thereto.

25. Performance

The Contractor shall be responsible for the due and faithful performance of the Contract in all respects according to the drawings, specifications, particulars and all other documents referred to in the Contract. Any approval which the Purchaser/Consultant may have given in respect of the stores, materials, supplies or other particulars and the work or the workmanship involved in the Contract (whether with or without test carried out by the Contractor or the Purchaser) shall not relieve the Contractor from his obligations and notwithstanding any approval or. acceptance given by the Purchaser/Consultant, it shall be lawful for the Purchaser to reject the material, if it is found that the materials supplied and/or erection and/or construction work carried out by the Contractor are not in conformity with the terms and conditions of the Contract.

26. Termination

If the Contractor fails to execute the work or any part thereof with such diligence as will ensure its completion within the time specified in the contract, or extension thereof, or fails to complete the said work within such time or fails to perform any of his obligations under the contract or in any manner commits a breach of any of the provision of the contract, it shall be open to NED in its option, by written notice to the contractor: -

- (a) To determine the contract; in which event the contract shall stand terminated and shall cease to be in force and effect on and from the date notified by the NED in this behalf, whereupon the contractor shall stop forthwith all or any of the contract work, then in progress and the NED may on its part, may take over the work remaining incomplete by the Contractor and the contractor and his sureties if any, shall be liable to the NED for any excess cost occasioned by such take over and completion by the NED or by appointing any other agency over and above the rates of remuneration payable under the contract.
- (b) Without determining the contract, to take over the work of the Contractor or any part thereof and complete the same through any other agency at the risk and cost of the Contractor and the Contractor, and his sureties shall be liable to NED for any excess cost/additional cost

occasioned by such work having been so taken over and) completed by NED and/or through any other agency over and above the remuneration payable under the contract.

(c) Before determining the contract, as aforesaid, and provided that, in the judgment of the NED the default or defaults committed by the Contractor is or are curable or may be cured by the Contractor if any opportunity is given to him to do so, the NED may, by notice, in writing, call upon the Contractor to cure the default within such time as may be specified in the notice.

In. the event of the NED proceeding in the manner herein above prescribed-

- (a) The whole of the Security Deposit furnished by the Contractor or retained by the NED shall be liable to be forfeited, without prejudice to the right of the NED to recover from the Contractor, the excess cost referred to aforesaid. The NED shall also have the right to take possession of the sites for completing the work or any part thereof, with any or all such materials, equipment, machinery, tools and tackles belonging to the Contractor as may be deployed used for the work & the contractor shall not be entitled for any compensation for use or damage to, such materials, equipment, plant.
- (b) The money that may have become due to the Contractor on account of work executed by him its already shall not be payable to him/its until after the expiry of six calendar months reckoned from the date of determination of contract or from the taking over of the work or part thereof by the NED as the case may be, during which period the responsibility for faulty workmanship in respect of such work shall, under the contract rest exclusively with the Contractor and shall be subject to deduction of all amounts due from the NED to the Contractor, whether under the terms of the contract or otherwise, authorized or required to be recovered or retained by the NED.

The NED shall also have the right to proceed in the manner prescribed in sub-clauses above, in the event of the contractor abandoning the execution of the contract work for a continuous period of seven days, or becoming bankrupt or insolvent, or compounding with his creditors or assignees the contract in favor of his creditors or any other person or persons, or being a firm or a corporation goes, into voluntary liquidation, provided that in the said event, it shall not be necessary for the NED to give any prior notice to the Contractor.

Termination of the contract as aforesaid shall not prejudice or affect the rights of the NED which may have accrued up to the date of such termination.

27. Dispute, Jurisdiction

The place of the contract shall be KARACHI, Pakistan. In cases of any differences, the same shall be resolved by mutual discussions and agreement.

No courts other than the courts located at KARACHI, Pakistan shall have jurisdiction over any matter concerning any aspect of the work under this tender.

28. Governing Law

The contract shall be construed in accordance with and governed by the laws of Pakistan.

29. Government and Statutory Clearances

The contractor shall be responsible for obtaining all the necessary clearances and permissions for project.

30. Assignment

The Contractor shall not assign its rights and obligations under the terms of this Contract to any party person without the written consent of NED.

31. Completion

Any supplies and services which might have not been specifically mentioned in this Contract but are necessary for the scope mentioned in Terms & Conditions and Technical Specifications and/or completeness of the works at the highest possible level, including any royalties, license fees & compensation to be paid, whether incurred by the contractor or by a third party for the work covered in the. scope, regardless of when incurred, shall be supplied/provided by the Contractor without any extra cost to NED and within the time schedule for efficient, smooth and satisfactory operation and maintenance of the works at the highest possible level under Pakistan conditions (but according to international standards for facility of this type), unless expressly excluded from the scope of supplies and services in this contract.

32. Work Completion Certificate

On completion of work, the contractor will apply to the NED University for the issuance of work completion certificate and the same will be issued within 45 days of the completion of work in all respects, after verifying from the completion documents and satisfying himself that the work has been completed in accordance with details set out in the contract documents. No completion certificate shall be given nor shall the work be deemed to have been executed until the export of generated power commenced and all scaffolding, surplus materials and rubbish is cleaned off the site completely. The following documents are to be submitted for issuance of work completion certificate:

a) The technical documents according to which the work was carried out.

- b) Three sets of as built drawings showing therein the modification and corrections made during the course of execution.
- c) Certificates of tests performed for various equipment's works, including proof of equipment import documents with verifiable serial numbers.
- d) Statutory clearances permissions.
- e) Payment of all statutory duties, taxes, labor wages & others.
- f) No dues and No claim Certificate.
- g) Indemnification Bond on non-judicial stamp paper of appropriate value by contractor.
- h) The copy of certified initial meter reading of main meter and back up meter signed by NED etc. Copy of all necessary licenses.

33. Tests / Inspection

- 1. All the tests in accordance with the standards shall be carried out at the manufacturer's works on all the equipment and accessories so as to ensure efficient operation and satisfactory performance of all the component/parts. The Bidder shall furnish a complete list and details of all such tests to be conducted on different equipment. The contractor will furnish a schedule of testing so that NED may associate his representative to witness the test. The contractor shall also furnish all test / inspection reports/ certificates.
- 2. Any special test to be performed shall be mutually agreed upon between the contractor and NED.
- 3. Equipment's shall be further tested at site, as required, before commissioning.
- 4. The work is subject to inspection at all times and at all places by the NED. The contractor shall carry out all instructions given during inspection and shall ensure that the work is being carried out according to the relevant codes of practice during the performance of the work.
- 5. The decision of the NED in regard to the quality of work and materials and performance to the specifications and drawings shall be final.
- 6. If any item is rejected during test/ inspection, the same shall be replaced by contractor without any cost.

34. Special Conditions for Contractor

1. Term

The Bidder will ensure that all work will be completed in 6 months after the award of contract.

2. Scope of Work

- a. This is required to install 100kW grid tied roof-top solar system with the provision of Net metering, Smart energy meter, Weather Monitoring Station (WMS) showing solar irradiation sensor, ambient temperature sensor and wind speed monitor with necessary data logger and all necessary equipment protection, following IEC 62548 standards.
- b. NED University reserve the rights to check the quality of solar panel at the site for verification of no major cracks on solar panel after the installation. Detailed technical guidelines are given in Appendix 1. Some details are as follows:
- c. The individual Solar PV array shall be installed using fixed PV array support structure with the adjustable length from 20 degree to 30 degree.
- d. Earth pits are required at sufficient distance for DC system, AC system and for surge arrestor system with earth resistance value equal to or below 1 ohm.
- e. Ensure each & every piece of electrical equipment & apparatus shall be connected to the main earth bus by means of branch main connection of earth continuity conductors.
- f. Ensure all electrical equipment, except those operating at extra low voltages will be provided with an earth terminal.
- g. The inverter shall be installed in the control room/substation/ open space/pillar box as per site requirement. The DC and AC distribution boxes, DC and AC cabling, energy meters and data acquisition system shall be installed accordingly.
- h. Enough space in between the panel arrays and in between panel and wall should be left for moving and cleaning the solar panels.
- i. Desktop and/or mobile app monitoring system showing inverter and WMS parameter. Overall application must be capable of calculating performance ratio of the system.
- j. Inverters will be installed at LT room and the net metering will be done at the substation **A** (near to mosque). Currently, LT room is being supplied from the substation **A**.

k. **Approximate distances** are as follows:

- i. Sub-Station to LT Room = 700 Rft
- ii. Circulation library to LT Room = 180 Rft
- iii. Reference Library to LT Room = 300 RFt
- 1. The bidder has to provide the details of any additional works (not covered above), but NECESSARY for the functioning of the system. The works of minor nature, which are not mentioned, shall be incorporated by the bidder.
- m. The bidder has to provide the details of any additional works (not covered above), but NECESSARY for the functioning of the system as an "Additional Item" with proper justification of "NEED". The works of minor nature, which are not mentioned, shall be incorporated by the bidder.

3. Personnel

The Bidder shall employ only such personnel who are adequately qualified and experienced for installation of solar system.

4. Metering and Data Logging

- 1. Daily Generation report: The data logger must be capable of measured daily data at 5 minutes or lesser interval and energy exported and imported to the grid and provides the same to NED in electronic form as explained earlier. These data shall be transferred to NED in a suitable form in real time at ASURE centre or any suitable point as decided by the NED University. The right of use of the data shall remain with NED.
- 2. The Metering System (which shall include energy meter, current and potential transformers etc.) as per metering code, as per requirement of NED University. The Metering System will be designed so as to measure outgoing and incoming energy and power delivered by the Operator for the owner at the delivery point, i.e. point of inter connection and also for import of energy for any purpose. The accuracy class of the energy meters and current and potential transformers will be selected as per international standards so that all levels of energy produced or taken by the solar power plant will be measured accurately, to the satisfaction of NED University.
- 3. All testing and metering equipment shall conform to the relevant IEC/NED/KE.
- 4. All meters either WMS, energy meters will be protected against the weather conditions including rain and soils.

35. Errors and Omissions:

a. The Contractor shall be responsible for all discrepancies, errors and omissions in the drawings, documents or other information submitted by him, irrespective of whether these have been approved, reviewed or otherwise accepted by the Purchaser or not.

However, any error in design/drawing arising out of any incorrect data/written information from Purchaser will not be considered as error and omissions on part of the Contractor.

b. The Contractor shall take all corrective measures arising out of discrepancies, errors and omissions in drawings and other information within the time schedule and without extra cost to the Purchaser.

The Contractor shall also be responsible for any delay and/or extra cost if any, in carrying out engineering, and site works by other agencies arising out of discrepancies, errors and omissions as well as of any late revision/s of drawings and information submitted by the Contractor.

36. CLARIFICATION OF TENDER DOCUMENTS

No bidder shall be allowed to alter or modify his bid after the expiry of deadline for the receipt of the bids. Provided that the Procuring Agency may ask the bidders for clarifications needed to evaluate the bids but shall not permit any bidder to change the substance or price of the bid. Any Request for clarification in the bid made, by the procuring agency, shall invariably be in writing. The response to such shall also be in writing.

37. Publication/Literature/Catalogue in Hard Copies/CDs will be provided along with offer. Moreover, the supplier will be bound to provide the following.

Maintenance Spares to be provided.

Essential Running Spares to be provided.

Certificate of Test Data/Calibration will be provided.

38. Errors in the Bids.

(i). Any arithmetic errors found during evaluation of bids will be rectified on the following basis:

- (a) If there is a discrepancy between the unit price that is obtained by multiplying the unit price and quantity, the price shall prevail and the total price shall be corrected by the University.
- (b) If there is a discrepancy between the words and figures, the amount in figures shall prevail.
- (c) If there is any discrepancy between the total tender price entered in the Article of Agreement and the total shown in the Schedule of Prices, the amount stated in the Article of Agreement shall be corrected by the University in accordance with the corrected schedule of Prices.

If the tenderer does not accept the corrected amount of the tender, his/her Tender will be rejected and the performance security submitted with the tender shall be forfeited.

39. TECHNICAL PROPOSAL REQUIREMENTS

Profile

- o Company Profile showing Financial Strength and turn over for last 03 years
- o No of years company is serving in the filed
- o Locations / Address of Company Offices in all over Pakistan

A. Experience

- o Documents / Certificates showing complete past Projects.
- o Documents / Certificates of completion of similar nature of Projects from Clients

B. Technical Staff

- o List of Technical / Engineering Staff, Supporting Staff etc.
- o List of personnel / staff having specialization in relevant filed.

C. Technical Bid Completeness / Closeness to Specification

Details of specifications of respective offering items on manufacturer / dealer's letter along with catalogue, brochures, diagrams, presentation, all other relevant documents etc.

40. SELECTION – EVALUATION PROCESS

1. Final assignment award will be on the basis of combined technical and financial score in the following manner:

Proposal	Weightage
Technical	70%
Financial	30%
Total	100%

- 2. Technical evaluation criteria are as under.
- 3. The bids scoring less than 70% marks in the Technical Evaluation will be rejected and their financial bid envelope will be returned unopened.
- 4. The final score of technical bids will be added to the financial score and final award of contract decision will be based on total of technical score plus financial score.

41. EVALUATION OF PROPOSAL

Table 1: Eligibility Criteria

No.	Eligibility Criteria	Yes	No	Attach Evidence
1.	Active Certification with AEDB for Category ARE-V2 (Certification of			
	Vendors/Installers/Service Providers for of On-Grid, Off-grid and hybrid			
	Wind and Solar PV Installations up to 250 KW capacity under the recent			
	List of Certified Companies under AEDB Certification Regulation 2018)			
2.	The bidder should have at least three years' experience in design, manufacture, supply, Installation and commissioning on-grid solar solutions in Pakistan and must have required licenses by regulatory authorities including AEDB and K Electric for the work			
3.	Details of turn-over (Including in terms of Rupees) of at least last three years that Average turn-over of at least last three years should not be less than Rs 22 Million per annum, as per online annual returns submitted to			
	FBR.			

4	1.	List of Similar Projects completed with Documentary Proof. (Work		
		Order and Completion Certificate)		
4	5.	Affidavit upon original stamp paper that the firm has never been black		
		listed, not involved in any litigation with any government, Semi-		
		Government & Autonomous Body.		
6	5.	Valid Registration of the firm with tax authorities FBR, GST and SRB		
		with proof of company in active tax payer list. Professional Tax paid &		
		copy of CNIC along-with company registration. Further eligibility is		
		mentioned in the bidding documents.		
7	7.	Bid Security @ 5% of total Bid Price		

Table 2: Technical Data

No.	Technical Categories	Units	Please Enter Response	Technical Score	Instructions
1.	Number of Solar System Installation and Commissioning Projects greater or equal to 100 KW since 1st January 2015 (in private sector)	Number		15	Attach work order (with annexures marked and indicated)
2.	Number of Solar System Installation and Commissioning Projects greater or equal to 100 KW since 1st January 2015 (in public sector)	Number		15	Attach work order (with annexures marked and indicated)
3.	Cumulative Capacity of installed Solar Systems since 1st January 2015 (in private sector)	Number		15	Attach work order (with annexures marked and indicated)
4.	Cumulative Capacity of installed Solar Systems since 1st January 2015 (in public sector)	Number		15	Attach work order (with annexures marked and indicated)
5.	Number of PEC registered engineers / technical Staff/ Site supervisor and their experience(s)	Number		5	Attach a summary with their details
6.	Number of technical trainings (related with solar system or their integration) received by the registered engineers/staff in last three years i.e. from 1st Jan 2019	Number		5	Attach a summary with their details
7.	Number of projects with net metering involved since 1st January 2015 anywhere in Pakistan	Number		10	Attach work order (with annexures marked and indicated)
8.	Number of projects with net metering involved since 1st January 2015 anywhere in Karachi	Number		10	Attach work order (with annexures marked and indicated)
9.	Financial Health (Revenue) in last three years	PKR		10	Attach audited/signed statements for years 2020-2021, 2019-20 and 2018-19
			Total Technical Score	100	70% weightage in Grand Scores

Table 3: Financial Data

	Table 5: I manetal Data							
No.	Financial Data	Units	Please enter Response	Financial Score	Instructions			
1.	Minimum cost of the project, meeting all technical requirement and covering all taxes.	PKR		80				
2.	LCOE, calculated for 25 years warranty period	PKR per kWh		20				
			Total Financial Score	100	30% weightage in Grand Scores			

Note that in each financial category, the best response will get full score for that category, and the other responses will get $\frac{1}{2}$ proportional scores.

Table 4: Grand Score

No.	Grand Score	Scores of 100	Weight	Weighted Score
1.	Technical Score		70%	
2.	Financial Score		30%	
	•		Grand Total Score	

Award of contract

41. Post – Qualification

- 41.1 In the absence of prequalification, the procuring agency may determine to its satisfaction whether that selected Bidder having submitted the most advantageous bid is qualified to perform the contract satisfactorily.
- 41.2 The determination will take into account the Bidder's financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Claus-7 as well as such other information as the Procuring agency deems necessary and appropriate.
- 41.3 An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Procuring agency will proceed to the next lowest evaluated bid to perform satisfactorily.

42. Award Criteria

- 42.1 The Procuring agency will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the most advantageous evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.
- 43 Procuring
 Agency's
 right to vary
 quantities at
 the time of
 award

The Procuring Agency reserves the right to increase/decrease the quantity of the required items and /or purchase part items already tendered either in full or in part. The Procuring Agency reserves the right to accept or reject any or all of the Tenders; divide business amongst more than one bidder.

- 43. Procuring agency's Right to Accept any Bid and to Reject any or All Bids
- 43.1 Subject to relevant provisions of SPP Rules 2010 (Amended 2019), the Procuring agency reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award.
- 43.2 Pursuant to Rule 45 of SPP Rules 2010 (Amended 2019), Procuring agency shall hoist the evaluation report on Authority's web site, and intimate to all the bidders seven days prior to notify the award of contract.
- 44. Notification of Award
- 44.1 Prior to the expiration of the period of bid validity, the Procuring agency shall notify the successful Bidder in writing, that its bid has been accepted.

44.2 Upon the successful Bidder's furnishing of the performance security pursuant to ITB Clause 26, the Procuring agency will promptly notify each unsuccessful Bidder and will discharge its bid security.

46. Signing of Contract

- 45.1 At the same time as the Procuring agency notifies the successful Bidder that its bid has been accepted, the Procuring agency will send the Bidder the Contract Form provided in the bidding documents, incorporating all agreements between the parties.
- 45.2 Within fourteen (14) days, or any other period specified in BDS, of receipt of the Contract Form, the successful Bidder shall sign and date the contract and return it to the Procuring agency.

47. Performance 46.1 Security

6.1 Within seven (07) days, or any other period specified in BDS, of the receipt of notification of award from the Procuring agency, the successful Bidder shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the bidding documents, or in another form acceptable to the Procuring agency. Performance Security @ 5% of the total Contract Value in the form of Deposit at Call or Pay Order or Demand Draft or a Bank Guarantee issued by a scheduled bank in Pakistan

48. Corrupt or Fraudulent Practices

47.1 The Government of Sindh requires that Procuring agency's (including beneficiaries of donor agencies' loans), as well as Bidders/Suppliers/Contractors under Government-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the SPPRA, in accordance with the SPP Act, 2009 and Rules made there under:

- (a) "Corrupt and Fraudulent Practices" means either one or any combination of the practices given below;
 - (i) "Coercive Practice" means any impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence *the* actions of a party to achieve a wrongful gain or to cause a wrongful loss to another party;
 - (ii) "Collusive Practice" means any arrangement between two or more parties to the procurement process or contract execution, designed to achieve with or without the knowledge of the procuring agency to establish prices at artificial,

noncompetitive levels for any wrongful gain;

- (iii) "Corrupt Practice" means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the acts of another party for wrongful gain;
- (iv) "Fraudulent Practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;

b) "Obstructive Practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract or deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements before investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or acts intended to materially impede the exercise of inspection and audit rights provided for under the Rules.

General Conditions of Contract

1. Definitions

- 1.1 In this Contract, the following terms shall be interpreted as indicated:
 - (a) "The Contract" means the agreement entered into between the Procuring agency and the Supplier, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
 - (b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.
 - (c) "The Goods" means all of the equipment, machinery, and/or other materials, which the Supplier is required to supply to the Procuring agency under the Contract.
 - (d) "The Services" means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Supplier covered under the Contract.
 - (e) "GCC" mean the General Conditions of Contract contained in this section.
 - (f) "SCC" means the Special Conditions of Contract.
 - (g) "The Procuring agency" means the Sindh Public Procurement Regulatory Authority (SPPRA), Government of Sindh.
 - (h) "The Supplier" means the individual or firm supplying the Goods and Services under this Contract.
 - (i) "SPP Rules 2010" means the Sindh Public Procurement Rules 2010 (Amended 2019).
 - (j) "Day" means calendar day.

2. Standards

The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standards appropriate to the goods' country of origin. Such standards shall be the latest issued by the concerned institution.

3. Patent Rights

The Supplier shall indemnify the Procuring agency against all third- party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof in the Islamic Republic of Pakistan.

4. Performance Security

4.1 Within fourteen (14) days, or any other duration as specified in SCC, of receipt of the notification of Contract award, the

- successful Bidder shall furnish to the Procuring agency the performance security in the amount specified in SCC.
- 4.2 The proceeds of the performance security shall be payable to the Procuring agency as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
- 4.3 The performance security shall be denominated in the Pak rupees and shall be an unconditional bank guarantee, pay order, call deposit as, provided in the bidding documents or another form acceptable to the Procuring agency;
- 4.4 The performance security will be discharged by the Procuring agency and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless specified otherwise in SCC.

5 Inspections and Tests

- 5.1 The Procuring agency or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Procuring agency. The Procuring agency shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.
- 5.2 Should any inspected or tested Goods fail to conform to the Specifications, the Procuring agency may reject the Goods, and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Procuring agency.
- 5.4 The Procuring agency's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival shall in no way be limited or waived by reason of the Goods having previously been inspected, tested, and passed by the Manufacturer.
- 5.5 Nothing in GCC Clause 5 shall in any way release the Supplier from any warranty or other obligations under this Contract.

6. Packing

The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage.

7. Delivery and Documents

Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in the Schedule of Requirements. The details of shipping/ transportation and/or other documents to be furnished by the Supplier are specified in SCC.

8. Insurance

The Contractor shall insure against liability and shall continue such insurance during the whole of the time that any persons are employed by him on the Works. The Contractor shall, without

limiting his or the Employer's obligation and responsibilities and the Employer against liabilities for death of or injury to any person or loss of or damage to any property (other than the works) arising out of the performance of the Contract. The Contractor shall produce Third Party Insurance Policy including Employer's Property to the NEDUET, when required, such policy of insurance and the receipt for the payment of the current premium. The rating of the Insurance Company should be at least A by PACRA / JCR-VIS.

9. Transportation

The Supplier is required under the Contact to transport the Goods to a specified place of destination and shall be arranged by the Supplier, and related costs shall be deemed to have been included in the Contract Price.

10. Incidental Services

- 10.1 The Supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
- (a) performance or supervision of on-site assembly and/or start-up of the supplied Goods;
- (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
- (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
- (d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and

11. Spare Parts

- 11.1 The Supplier should provide any or all of the notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:
- (a) such spare parts as the Procuring agency may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
- (b) in the event of termination of production of the spare parts:
- (i) advance notification to the Procuring agency of the pending termination, in sufficient time to permit the Procuring agency to procure needed requirements; and
- (ii) following such termination, furnishing at no cost to the Procuring agency, the blueprints, drawings, and specifications of the spare parts, if requested.

12. Warranty

12.1 The Supplier warrants that the Goods supplied under the Contract are new, unused, of desired models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the

Procuring agency's specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.

- 12.2 The warranty of solar panels and inverters are stated in the specification, Annexure 4.
- 12.3 The warranty / maintenance period of other equipment shall remain at least valid for six (06) months after the completion of the project.
- 12.3 If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, within a reasonable period, the Procuring agency may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Procuring agency may have against the Supplier under the Contract.

13. Payment

- 13.1 The firm should submit stamp duty as per Government Rule before execution of work.
- 13.2 Within 30 days after the issuance of inspection certificate and consignee's receipt certificate as mentioned in SSC clause 6.
- 13.3 If the supply is not according to the specifications or unsatisfactory, the Contract will be rejected and cancelled at the risk and cost of Firm
- 13.4 If the firm fails to execute the contract/supply order as per condition, action will be taken against them which may be their black listing and Earnest Money. / Security Deposit will be forfeited.
- 13.5 In case of late delivery @ 0.1% per day will be charged on bid amount deducted from the bill, but not more than 10% of contract value.
- 13.6 The currency of payment is Pak. Rupees.

14. Prices

Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid,

- 15. Contract
 Amendments
- No variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.
- 16. Delays in the Supplier's Performance
- 16.1 Delivery of the Goods and performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Procuring agency in the Schedule of Requirements.
- 16.2 If at any time during performance of the Contract, the Supplier or its subcontractor(s) should encounter conditions obstructing timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Procuring agency in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Procuring agency shall evaluate the situation and may at its discretion

extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of Contract.

16.3 Except as provided under GCC Clause 19 a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 17 unless an extension of time is agreed upon pursuant to GCC Clause 16.2 without the application of liquidated damages.

17. Liquidated Damages

Subject to GCC Clause 19, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Procuring agency shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in SCC. Once the maximum is reached, the Procuring agency may consider termination of the Contract pursuant to GCC Clause 18.

18. Termination for Default

- 18.1 The Procuring agency, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate this Contract in whole or in part:
- (a) if the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, or within any extension thereof granted by the Procuring agency pursuant to GCC Clause 16: or
- (b) If the Supplier fails to perform any other obligation(s) under the Contract.
- (c) If the Supplier, in the judgment of the Procuring agency has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.
- 18.2 In the event the Procuring agency terminates the Contract in whole or in part, pursuant to GCC Clause 18.1, the Procuring agency may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and supplier shall be liable to the Procuring agency for any excess costs for such similar Goods or services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

19. Force Majeure

19.1 Notwithstanding the provisions of GCC Clauses 16, 17 and 18, the Supplier shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

> 19.2 For purposes of this clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Procuring agency in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

> 19.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Procuring agency in writing of such condition and the cause thereof. Unless otherwise directed by the Procuring agency in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

20. Termination for Insolvency

20.1 The Procuring agency may at any time terminate the Contract by giving written notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accursed or will accrue thereafter to the procuring agency.

21. Termination for Convenience

- 21.1 The Procuring agency, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Procuring agency's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- 21.2 The Goods that are compete and ready for shipment within thirty (30) days after the Supplier's receipt of notice of termination shall be accepted by the Procuring agency at the Contract terms and prices. For the remaining Goods, the Procuring agency may
 - (a) to have nay portion completed and delivered at the Contract terms and prices; and / or
 - (b) To cancel the remainder and pay to the Supplier and agreed amount for partially completed Goods and Services and for materials and parts previously procured by the Suppliers

22. Resolution of **Disputes**

Resolution of dispute shall be through Mechanism for Redressal of Grievances as provided in the rules or through Arbitration Act 1942.

23. Governing Language

Contract shall be written in English language correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

24. Applicable Law

The Contract shall be interpreted in accordance with the SPP Rules 2010 (amended 2019).

25. Taxes and **Duties**

Supplier shall be entirely responsible for all provincial and federal taxes, duties (including stamp duty), license fees, etc., incurred until delivery of the contracted Goods to the Procuring agency.

The

26. Overriding
effect of Sindh
Public
Procurement
Rules 2010
(Amended 2019)

In case of conflict or primacy of interpretation the provisions of SPP Rules 2010 (amended 2019) shall have an overriding effect notwithstanding anything to the contrary contained in these bidding documents

Bid Data Sheet

The following specific data for the subject procurement to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB) Part One. Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB 1 Name of Procuring Agency: Office of The Assistant Director Procureme – II, NED University, Karachi. Tel # 99261261-68, (Ext: 2291), Fax: 99261255							
Name of Contract. "Design, Supply, Installation, Testing and Commissioning of Solar System with the Capacity of 100kWp Solar Power Solution on Main and Circulation Library at NED University of Engineering and Technology, Karachi".							
Bid Price and Currency							
ITB 4 FOR Prices quoted by the Bidder shall be "fixed" and in" Pak Rupees"							
Preparation and Submission of Bids							
TB 7 Selection / Eligibility / Responsiveness criteria: 1 Firm comply with specifications mentioned in bidding documents. 2 Bid should be accompanied with client list. 3 Bidder should strictly compliant with technical specification; no optional /alternative item will be accepted. 4 The bidder must have at least 3 years of experience in the relevant field. 5 Income Tax, GST and SRB Registration Certificate 6 Details of turn-over (Including in terms of Rupees) of at least last three years that Average turn-over of at least last three years should not be less than Rs 22 million, as per online annual returns submitted to FBR. 7. Further as per Evaluation and Selection Criteria mentioned in the Bidding Documents 8. The bidder should have experience in design, manufacture, supply, Installation and commissioning on-grid solar solutions in Pakistan and must have required licenses by regulatory authorities including AEDB and K Electric for the work. 9. The Bidder shall give an undertaking that the information & document submitted in the offer are correct & authentic (Annexure-1) 10. The bidder must Category ARE-V2 (Certification of Vendors/Installers/Service Providers for of On-Grid, OFF-Grid & Hybrid Wind and Solar PV Installation up to 250 KW capacity under the list of certified companies under AEDB Certification Regulation 2018) 11. Organizational profile. 12. Detail address indicating name of contact person for the service unit or regional							
office or manufacturing set up in Pakistan. 13. Bidder must provide the documentary evidence to all above points. 14. The bidder will provide all the technical details, drawings and BOQ of solar							
system including civil and electrical work. 15. The Bidder will also provide solar array designing file, PVsyst file. 16. Prices must include all transportation, loading and unloading charges.							
ITB 9 Amount of bid security. 5% of Bid Value							
ITB 10 Bid validity period. 90 days							
ITB 11 Number of copies. One original							
ITB 13 Deadline for bid submission. As notified in NIT							
ITB 19.1 Bid Evaluation: The most advantageous bid							

Other:-

i. In case of any unforeseen situation or government holiday resulting in closure of office on the date of opening. Bid shall be submitted / opened on next working day at the given time

- ii. Tender documents can also be obtained by post against Pay Order/BankDraft of Rs-800/- as courier charges in addition of tender fee
- iii NEDUET may reject all or any bid subject to relevant provision of SPP
- Rules and may cancel the bidding process at any time prior to acceptance of bid or proposal as per Rule 25(1) of said rules.
- iv Incomplete, conditional and tender without required earnest money in thespecified form/format shall be rejected.
- v. Bidders are advised that before filling the bidding documents all pages of bidding documents should carefully be rechecked. If any page(s) / paper(s) of bidding documents are missing that can be downloaded from the official website of this University and SPPRA, and also can be obtained from the office of the ADP-2 in Procurement Cell, NEDUET, Karachi. Bid(s) with incomplete bidding documents will straightaway be rejected.
- vi Bidders are required to provide their valid e-mail Ids and contact numbers
- (s) for effective and timely communication.

Special Conditions of Contract

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the GCC is indicated in parentheses.

1. Definitions (GCC Clause 1)

GCC 1 (g)—The Procuring Agency is: Office of the Procurement Cell, NED University of Engineering & Technology, Karachi.

2. Performance Security (GCC Clause 4)

GCC 4—The amount of performance security, as a percentage of the Contract Price, shall be: 5%.

3. Inspections and Tests (GCC Clause 5)

Inspection of NEDUET shall inspect the procured good and ensure that it meets the tender specifications before its acceptance

4. Delivery and Documents (GCC Clause 7)

GCC 10—Supplier shall supply and install the good within ____ Days after signing the contract and shall submit the following.

- (i) Supplier's invoice showing Goods' description, quantity, unit price, and total amount;
- (ii) Packing List identifying the contents of Supply;
- (iii) Delivery note.
- (iv) Warranty and guarantee certificate;

5. Warranty (GCC Clause 12)

The equipment shall bear Standard warranty (with free parts & labor) from the date of installation / acceptance. Upon expiration of warranty, Purchaser at its option may enter into a Service Level Maintenance Agreement upon expiry of the warranty period in accordance with terms embodied in Appendix-A hereto

6. Payment (GCC Clause 13)

Project of minimum 100KWp has to be commissioned within 6-months of signing of contract agreement. The whole project to be installed and commissioned and made operative as per contractual obligations. NED will pay no cost/ charges to this effect. Once the project is successfully made operative, NED will pay the monthly installments proportional to the solar generated electricity units as per agreed rates against actual consumption/generation. All taxes will be applicable as per rules.

7. Liquidated Damages (GCC Clause 17)

If the Supplier fails to deliver the goods or perform the services within the time period(s) specified in the contract, the Purchaser shall, without prejudice to its other remedies under the contract deduct from the Contract Price, as liquidated damages, a sum equivalent to 0.1 percent of the Contract Price for each day of delay until actual delivery or performance, up

to a maximum deduction of 10% of the Contract Price. Once the maximum is reached, the purchaser may consider termination of the contract.

8. Resolution of Disputes (GCC Clause 22)

In the case of a dispute between the Procuring agency and the Supplier, the dispute shall be referred to the dispute resolution mechanism as defined in rule 31, 32 and 34 of the (SPPR 2010) Amended 2019

9. Applicable Law (GCC Clause 24)

GCC 24 Contract shall be interpreted in accordance with the Sindh Public Procurement law of Sindh.

SCHEDULE OF REQUIREMENTS

The delivery schedule hereafter expressed the date of delivery required.

S. No	Items / Quantity	Time of Completion from date of Award	Location of Supply
1.	As Specified in Bill of Quantities & Specifications as given in these documents	Six months	At Main and Circulation Library Main Campus NEDUET

Note: <u>specifications of above items are attached</u>

ANNEXURES

(To be submitted by bidders on official letter head)	Annexure 1
-	
Γο,	
The Director Procurement	
NEDUET Karachi	
Sub: Offer in response to Notice Inviting Tender dated for Design, Manufacture, Supply, installation, En	rection, Testing and
Commissioning of 341 KW Solar Power Plant at <u>NED</u> with associated power turnkey basis at project locations mentioned in the Tender Document.	
Sir, We the under signed Bidder, having read and examined in details the spacetimes & conditions and special terms & condition of the tender, do are heaffer to execute the contract as per specification as set forth in your bicconnection, we enclose the following documents for your kind perusal. 1. 2. 3.	ereby submitting our
We also further declare:	
The information & documents as enclosed herewith are correct & aut documents are with us and same can be produced as and when required.	thentic and original
(Authoriz	ed Signatory)
Name:	
Designat	ion:
NED Sea	ıl:

Annexure-2

SPECIFICATIONS AND QUANTITIES

Tender No. PC/NED/DWS/SOLAR/8008/2021

Item					ak. Rupees (Only	
Code	Description of			Unit Price			Total
No.	Items/Specifications		Without	Add	Total	Total	Amount
		Unit	GST/SRB	GST/SRB	With	Quantity	with
					GST/SRB	Required	GST / SRB
			1	2	3 = (1+2)	4	5 = (4x3)
			on of Main a	nd Circulati	on Library		
a.	Solar Panels	Nos.				225 – 190 (As	
	Solar Panels (only Tier I company)					applicable)	
	with 445W-535W rating and mono crystal line type. This is necessary						
	that the Recommended the supplier						
	will provide all the shipment details.						
	PSI and COC. The efficiency of						
	solar Cell must be greater than 20%						
	efficiency at STC.						
	Recommended brands are Jinko.						
	Trina, or Longi or Equivalent						
	Rating: 445 – 535W						
	Ruting, 440 200 VV						
b.	Inverter and smart energy	Nos.				2 pc	
	meter					_	
	Inverter rating 2x50kW all the						
	shipment and testing details.						
	Inverter arrangement should consist						
	or string isolation mechanism with						
	fuses /MCBs and necessary SPD-2 type surge arrestors for each string.						
	Inverter body need to grounded						
	with DC tray.						
	j						
	Recommended brands are Huawei,						
	SMA and Solis with compatible						
	smart meter. This is preferable that						
	the inverter and smart energy meter must be of same brand and						
	compatible with each other.						
	companione with each other.						
	A separate panel box (DB) is						
	required for metering purpose and						
	connection with grid.						
	Rating: 50kW (minimum)						
c.	Weather monitoring station					1	
	WMS capable of monitor,					_	
	recording, with desktop or mobile						
	app having solar irradiation sensor,						
	ambient temperature sensor, relative						
	humidity, UV index and wind speed						
	monitor. The overall system will						

	help in calculation of PR of the				
c.	system. Net-metering Application	Job.			100kW
	Bidder will also apply for the net- metering and complete the process of documentation. NED University will provide the necessary documentation required for application process. All the cost of application and documentation must be included in the total cost.				
	Ot	ther Ma	terial and Installation V	Vork	
d.	Solar Panel Structure Aluminum L2 structure with anti- corrosive material of Galvanized paint or Hot Dipped Galvanized. Gauge Services of panels used. size 2.0mm - 2.5mm. Quality approval is required from Services Department Rating: L2	No.			As per number of panels used
e.	Civil Work Details are available in specs of PV mounting Structure.	Job			Number of foundations will depend upon the number of structures.
f	DC Cable Copper, Single core, PVC/PVC, rated for minimum of 1000 V, cable sizes need to be rate based on BS 7671 (length of the cable as per site need). Fast Cable or Pakistan Cable Rating: 4mm2 IC Or Equivalent	Job.			As per site measurement
g	Excavation and backfilling Excavation and backfilling for Mechanical protection of DC cable run from one building to the substation. All cables must be armored against the mechanical damage.	Job.			01.
h.	AC Cable Cu/ XLPE/ PVC rated for 450 V. Cables sizes need to be rated based on BS 767 I (length of the cable as per Cable 70mm2 site need). Pakistan Cable, Fast Cable or Equivalent Rating: 35 mm2 4C for each inverter and 70mm2 4C for main cable.	Job.			As per site measurement
i.	Ground Cable Grounded Cable 4mm (panel). 10mm (main DB to earth/ lightning arrestor to earth).	Job.			As per site measurement

	Ta a a		-		Г	
	Pakistan Cable, Fast Cable Rating: 4&10mm Or Equivalent					
j.	DC Breakers/Fuses	Nos.				
	DC Breakers/ Fuses Fuses connected with each string ends, enclosed in					
	DC distribution box or .lunoon or					
	equivalent good quality					
	DC HRC fuses 1000V, 20A. rated					
	braking capacity of 33kA DC and minimum interrupting rating 1.3x In					
	Schneider or Equivalent					
	Rating: 1000V 20A					
k.	AC Breakers for inverters and main	Nos.			.02	
	Two AC Breakers 100A 4p for two					
	inverters					
	Rating: 4p 2x100A 25kA at 415V.					
	Main breaker on two inverters					
	breakers controlled via interface					
	protection device (Lovato or equivalent) enclosed in an AC					
	earthed Distribution Box					
	Rating: 4p 1x200A 25kA at 415V					
	Make: Schneider or equivalent					
	wake. Semicidel of equivalent					
1.	Surge Protection Device (SPD)	No.			01.	
	SPD 4P 60-65kA enclosed in an AC					
	earthed Distribution Box Schneider or equivalent					
	Rating: 4p 60-65Ka					
m.	AC Distribution Box/ Combiner	No.				
	Box Enclosing 3 AC breakers, Cu bus					
	bars, SPD, LED indications of RYB					
	phases, emergency switch, less than					
	or equal to 18 gauge.					
	This is also recommended to quote					
	the price of interface protection					
	device connected with main breaker of 200A for controlling purpose.					
n.	Metering distribution box	Nos.			01	
	gauge metering DB with proper earthing and provision of seeing					
	smart energy meter from the glass					
	cover for units recording. The Db					
	must be protected against all weather conditions.					
	weather conditions.					
0.	Cable tray Colvenized Coble tray is required to	Nos.			02.	
	Galvanized Cable tray is required to			<u> </u>		

	run from solar arrays-building up to the substation enclosing all DC cables. GI flexible can be used in indoor use only. 4x3 inches or as per site requirement perforated cable tray. Cable tray route must be mentioned in drawings						
p.	Earth Pits: Earth pits are required for Lightning arrestor,	No.				3 earth pits	
	DC earthing pit for solar structure and cable tray earthing, panel-panel earthing						
	Earthing pit(s) for inverter and AC Distribution Boxes.						
	Earth pit details and location must be mentioned in drawings.						
	Supply, installation, testing and commissioning of Earth Pits including copper bonded steel earth electrodes, 40 feet long and 19.07 mm nominal dia, bare copper conductor, 20-40ft boring, Earth pit / Inspection Chamber, Cad weld with copper conductor, Earthing low resistance Chemical compound, bentonite, cement etc., all necessary materials, complete in all respects.						
	This is required to provide Specifications & Drawings. Bidder will make sure that earth resistance should be less than 1 ohm of each earth pit.						
	Additional earth pit (if required) can be quoted as an additional item						
	Rating: 20-40 feet Depth (as per site need of R<1 ohm)						
q.	Other Accessories Other accessories including GI Cable Trays, Cu lightning Arrestor, SS/ GI Earthing Nut Bolt, Anchor Bolt, Distribution boxes DC, AC Combiner Box, MC4 connectors, Lugs, UPVC pipe Channel Patti & flexible, Rawl bolt, Cable Tie. Quality approval from Services						
	Department	Itom	<u> </u> 2. Solar Pan	el cleaning			
a	A high-pressure wesher make	Heili	4. Suiai Fall	ei Cicalling			
а.	a. A high-pressure washer, make						

	Karcher HDS 10/20-4M equivalent						
	or higher model,						
b.	iSolar 800 water-driven brush head						
	with 800 mm working width works		solar panels				
	with two contra-rotating disc		d on two adj				
	brushes.		gs, therefore				
c.	The above system must be equipped		ary cleaning	-			
	with all pipes compatible with high		ired at both b	_		01 unit	
	pressure washer and brusher and		er, the portal				
	other accessories required to clean		nent will mov	e at the site,			
	solar panels up to 10m or more of	whene	ver required.				
	length. The supplier must install and						
	demonstrate the cleaning on site.						
	Sub-Items (a. b. c.) Make Karcher or equivalent						
d.	Sufficient capacity water reservoir					02 Units (01 unit	
	at the roof of each building					on each roof top)	
	completed in piping in all respect.						
			1				
	Total						
	Total Bid Amount including all Provincial and Federal taxes & duties etc.,						

			_
Signature	& Stam	np of Ter	nderer

Annexure-4

Specification of Equipment

PV Module:

Minimum Specifications required
Tier 1, Jinko, Longi, JA, AEG, Canadian
Along with all shipping documents and flash test
report.
This is appreciable if the serial number of panels
could be verified from online database of the parent
company
Mono-crystalline
A grade
>20%
Must be +3 or more
-40°C~+85°C
-0.35%/°C
As per design
IEC61215(2016), IEC61730(2016)
ISO9001:2015: Quality Management System
ISO14001:2015: Environment Management System
ISO45001:2018: Occupational health and safety
management systems
Anodized Aluminium Alloy
IP 68 rated
4mm2 (IEC), 1000mm
MC4 or comparable, weatherproof.
3.2mm, anti-reflection coating, high transmission,
tempered glass
10 ~ 12 years product replacement warranty, if the
major component malfunction including glass
breakage and diode malfunctioning
10 ~ 12 years product performance warranty (90%
rated power at the end of 10 years at STC).
25 years product warranty

Note that: NED University reserves the right for random panel testing for STC (performance analysis during the guaranteed period) and EL (cracks analysis at the time of testing and commissioning). Cabling:

- 1. All exposed wiring (with the possible exception of the module interconnects) must be covered in conduits/ducts. Wiring through roofing, walls and other structures must be protected through the use of bushings.
- 2. Direct drilling/use of rawal bolt/screw at the roof is strictly prohibited.
- 3. Wiring shall be colour coded as per IEC standards and labelled at the start and termination point.
- 4. All wiring must be enclosed in earthed cable tray/ conduit particularly main DC cable run from solar array up to the inverter location in a substation.
- 5. Especially avoid installing the conduit direct over the roof; there must be distance not less than 2 inches between the roof surface and conduit/duct.
- 6. Wires (in case of trenching) should be buried under 2 feet and should be covered with conduit of suitable strength.
- 7. All wires must be terminated with proper end sleeves and wire thimbles with different colors for positive and negative polarity, as well as RYB-N.
- 8. Calculations must support following (or equal) BS 7671, IEE wiring regulations 17th Edition, IEC 60364:2001, IEC 61214 ed 1, sec 8.3 standards.
- 9. Cable voltage drop specifications are as follows:

- a. PV to Junction box and Junction box to inverter should not be more than 1.5% each.
- 10. All panel-panel connection with MC4 connector must be individually tied with each module's frame using cable tie in order to avoid contact with the ground.
- 11. Cables must be joined by the use of junction boxes, screw connectors and block connectors, MC4 or equalling connectors must be used for PV joints.
- 12. Brand should be Pakistan cables or Fast cables.

PV Mounting Structure:

Structure material	Aluminium
Wind loading	Mounting system should be able to allow air circulations for cooling in high temperature and with stand wind speed of 150km/hour at 3 sec gust.
Angle adjustment mounting structure	Angle adjustment 20-30 degree.
Material surface protection	Mounting structure should be corrosion free including nuts and bolts.
Civil work	Structure foundation will be prepared on site having the dimension of 12"x12"x6" 1:2:4 cement: crush and sand with 4" steel nail for mounting the PV module structure. Number of foundations will depend upon the sites.

Grid Tied Inverter

Grid Tied Inverter	D 11 111 (C11 (DIX)
Inverter Make	Brand should be verifiable (EU tier 1 only)
Inverter type	On grid with pure sine wave, also able to
	synchronize with generator on site.
Maximum Efficiency	98% or above
Output voltage range	3/N/PE, 220/380V, 230/400V
Rated AC Frequency	50Hz
Nominal AC active power	100,000W
Standby power consumption	Less than 3W
Operating temperature	-30 °C $\sim +70$ °C (+/-10 °C is acceptable)
Humidity	0 ~ 95% RH
Maximum THD	<3%
Performance warranty	10 years warranty of the inverter, if the inverter mal-
·	function or shows poor performance during the 10
	years life time.
MPPT Operating Voltage range	600V-1500V
Adjustable Power factor range	0.8 lagging – 0.8 leading
IP rating	IP 66
Topology	Transformer less
Protections	Input-side Disconnection Device
	Anti-islanding Protection
	AC Overcurrent Protection
	DC Reverse-polarity Protection
	PV-array String Fault Monitoring
	Surge protection
	DC Surge Arrester Type II
	AC Surge Arrester Type II
	DC Insulation Resistance Detection
	Residual Current Monitoring Unit
Applicable standards	
Safety	EN 62109-1/-2, IEC 62109-1/-2, IEC 62116
Grid Connection Standards	EN 50530, IEC 61727, IEC 60068, IEC 61683

Annexure-3

REQUEST FOR SOLAR POWER PLANT AT NED

Location	Bid Security (Rs)			
Main and Circulation Library	5% of the bid value			
at main campus NED				
University				
-				
As notified in the NIT.				
Any changes after pre-bid meeting will become part of tender				
documents.				
As notified in the NIT.				
As notified in the NIT.				
	Main and Circulation Library at main campus NED University As notified in the NIT. Any changes after pre-bid meet documents. As notified in the NIT.			

We request you to offer your lowest quotation for proposed solar power project on terms and conditions as mentioned in bidding document and submit all signed Annexures enclosed herewith.

Annexure-4

Financial Offer

Solar Power Plant Capacity	LCOE, calculated for 25 years
	warranty period
Minimum 100KWp	

Contract will be finalized with the firm quoting:

- 1) the lowest per unit charges of solar electricity provided to NED through the solar system (80% weightage)
- 2) The lowest value of LCOE (20% weightage)

after meeting criteria as prescribed in tender documents shall be deemed successful bidder.

Undertaking:

I/We, agree with the terms/conditions of tender inquiry. We have carefully read the terms and conditions mentioned in tender documents. We accept all these conditions.

Signature:	
Name:	
Designation:	
Stamp:	

(To be Printed on Company's Letterhead)

SAMPLE FORMS

Form-
Letter of Acceptance
Date:
To:
NED University of Engineering & Technology, Karachi,
Dear Sir:
Having examined the bidding documents, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver the required item in conformity with the said bidding documents for the sum of [total bid amount in words and figures] or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.
We undertake, if our Bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements.
If our Bid is accepted, we will obtain the guarantee of a bank in a sum equivalent to Five (5) percent of the Contract Price/Pay order for the due performance of the Contract, in the form prescribed by the Purchaser.
We agree to abide by this Bid for a period of 15 days from the date fixed for Bid opening under Clause 10 of the Instructions to Bidders, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.
We understand that you are not bound to accept the lowest or any bid you may receive.
Dated this day of 2021
[signature] [in the capacity of]
Duly authorized to sign Bid for and on behalf of

Form-II

Price Schedule in Pak. Rupees

Name of Bidder	_•	IFB Number	_•	Page of
----------------	----	------------	----	---------

1	2	3	4	5		6	7						
Item	Description	Country of origin	Quantity	Unit price		Unit price				Unit price		Total	Remarks (if any)
				Words	<u>Figure</u>								

Total Bid amount in figure:	
Signature of Bidder	_

Note:

- (i) In case of discrepancy between unit price and total, the unit price shall prevail.
- (ii) The unit and total prices Delivered at NED University of Engg. & Tech., Karachi should include the price of incidental services. No separate payment shall be made for the incidental services.

Form-III

Experience of Similar Supply and Installation

S. No.	Assignment Description	Name /Contact Details of Client	Cost	Start Date	End Date	Remarks

Registered Engineer and Staff Details

S. No	Name with designation	Highest qualification	PEC No.	Experience	CV and other documents Attached (Yes/ No)
1.					

Trainings of Registered Engineer and Staff for capacity building

S. No	Name with designation	Training title	Duration	Venue	Trainer Name	Proof Attached (Yes/ No)
1.						

Form-IV

of Eng	gineering & nd [name of S	ENT made the Technology, Ka Supplier] of [city a	rachi. (Her	einafter call	ed "the Pro	curing age	ency")	of the one
	REAS the Frement	Procuring agency of, NEDUET, K						for
	goods and s act Price").	services in the su						
NOW	THIS AGR	EEMENT WITN	NESSETH A	AS FOLLOV	WS:			
1.		greement words ly assigned to the					meanir	ngs as are
2.		ving documents reement, viz.:	shall be de	eemed to fo	rm and be a	read and	constru	ied as part
(a)	_	rm and the Price	Schedule s	uhmitted by	the Ridder			
(a) (b)		alle of Requirement		dominica by	the Didder,			
(c)		cal Specification						
(d)		al Conditions of C						
(e)		l Conditions of C	,	d				
(f)		ing agency's Not						
goods	after mentic	ration of the pay oned, the Supplie es and to reme Contract	er hereby co	ovenants wi	th the Procu	ring agen	cy to p	provide the
such o	ion of the g ther sum as	aring agency her goods and services may become pa ibed by the contr	es and the rayable unde	remedying o	f defects the	erein, the	Contra	act Price or
		hereof the parti heir respective la			_		be e	xecuted in
Signed agency		livered by		the		(for	the	Procuring
Signed	l, sealed, de	livered by		the		(for th	ne Supp	plier)

Form-V

Performance Security Form

То:
NED University of Engineering & Technology, Karachi.
WHEREAS [name of Supplier] (hereinafter called "the Supplier") has undertaken, in pursuance of Contract No. [reference number of the contract] dated 2021 to supplied [description of goods and services] (hereinafter called "the Contract").
AND WHEREAS it has been stipulated by you in the said Contract that the Supplier sha furnish you with a bank guarantee by a reputable bank for the sum specified therein as securit for compliance with the Supplier's performance obligations in accordance with the Contract.
AND WHEREAS we have agreed to give the Supplier a guarantee:
THEREFORE, WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of [amount of the guarantee in words and figures], and we undertake to payou, upon your first written demand declaring the Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limits of [amount of guarantee] aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein. This guarantee is valid until the day of2021
Signature and seal of the Guarantors
[name of bank or financial institution]
[address]
[date]

Form-VI

Manufacturer's Authorization Form

(where applicable)

To:
NED University of Engineering & Technology, Karachi.
WHEREAS [name of the Manufacturer] who are established and reputable manufacturers of [name and/or description of the goods] having factories at [address of factory]
do hereby authorize [name and address of Agent] to submit a bid, and subsequently sign the Contract with you against NIT No. [reference of the Invitation to Bid] for the above goods manufactured by us.
We hereby extend our full guarantee and warranty as per Clause 12 of the General Conditions of Contract for the goods offered for supply by the above firm against this Invitation for Bids.
[signature for and on behalf of Manufacturer]

Note: This letter of authority should be on the letterhead of the Manufacturer and should be signed by a person competent and having the power of attorney to bind the Manufacturer. It should be included by the Bidder in its bid.

Integrity Pact

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BY THE SUPPLIERS/CONTRACTORS/CONSULTANTS.

Contract Number:	Dated:		
Contract Value:			
Contract Title:			
the procurement of any contract, right, in	hereby declares that it has not obtained or induced nterest, privilege or other obligation or benefit from nistrative subdivision or agency thereof or any other rough any corrupt business practice.		
represents and warrants that it has fully depayable to anyone and not given or agranyone within or outside Pakistan either operson, including its affiliate, agent, shareholder, sponsor or subsidiary, any kickback, whether described as consultated inducing the procurement of a contract, rin whatsoever form, from Procuring Agedeclared pursuant hereto.	rality of the foregoing, Name of Supplier/Contractor/Consultant] eclared the brokerage, commission, fees etc. paid or eed to give and shall not give or agree to give to directly or indirectly through any natural or juridical associate, broker, consultant, director, promoter, commission, gratification, bribe, finder's fee or ion fee or otherwise, with the object of obtaining or ght, interest, privilege or other obligation or benefit, gency (PA), except that which has been expressly		
disclosure of all agreements and arranger transaction with PA and has not taken any above declaration, representation or warranger			
making any false declaration, not making action likely to defeat the purpose of this that any contract, right, interest, privileg	antl accepts full responsibility and strict liability for g full disclosure, misrepresenting facts or taking any s declaration, representation and warranty. It agrees e or other obligation or benefit obtained or procured any other right and remedies available to PA under woidable at the option of PA.		
[Name of Supplier/Contractor/Consultant] agrees to incaccount of its corrupt business practices equivalent to ten time the sum of any kickback given by [Name of Supplier/Contractor/Consultant]	demnify PA for any loss or damage incurred by it on and further pay compensation to PA in an amount of commission, gratification, bribe, finder's fee or consultant as aforesaid for the purpose of obtaining or act, right, interest, privilege or other obligation or		
Procuring Agency	[Supplier /Contractor/Consultant]		



NED UNIVERSITY OF ENGINEERING & TECHNOLOGY

DP/NED/145950/8008/ 2236

Date: 26 10 2021



NOTIFICATION

With reference to this University Office Order No. DR(Estab)/(1193)Vol-II/6331 dated: 16.06.2016, the Procurement Committee under Rule 7 of the Sindh Public Procurement Rules (as amended) comprising of the following Members has been constituted for Design, Supply, Installation, Testing and commissioning of Solar System with the Capacity of 100kWp Solar Power Solution on Main and Circulation Library at NED University of Engineering & Technology, Karachi (vide Case File No. PC/NED/DWS/ Solar/8008/2021), as follows:

 Engr. Muhammad Kashif Ali Ag. DDWS (Electrical) Works & Services Deptt. NEDUET, Karachi Convener

 Mr. Muhammad Mabroor Khan Administrative Officer Center for Excellence in Marine Biology University of Karachi Member

 Mr. Fawad Ul Hasan Kamran Assistant Director Procurement-II NEDUET, Karachi Member/Secretary

The TOR / functions / responsibilities of the aforesaid Procurement Committee will be in accordance with Rule-8 of SPP Rules. The tender will be opened on 24-11-2021 at 10:30 AM in the office of Assistant Director Procurement-II.

Email:

i. kashifaee@neduet.edu.pk

ii. mabroork@hotmail.com

iii. adfp2@neduet.edu.pk

2 h 1 p 2 2 2

NED UNIVERSITY OF ENGINEERING & TECHNOLOGY

No. DR (Estab)/(1003)/5730

Dated: 27/05 / 2016

OFFICE ORDER

In supersession of this office order No. DR (Estab)/(1003)/11418 dated 02-11-2015, the University Administration has constituted the Complaint Redressal Standing Committee comprising of the following officers to address complaints regarding all procurement issues in the University in pursuance of Clause 31(1) of the SPPRA rules:

1. Prof. Dr. Saad Ahmed Qazi
Dean (ECE)

Convener

2. Independent Professional from the relevant field Member

3. Nominee of Accountant General Sindh Member

Ag-REGISTRAR (L

To:

The Convener & all members

Copy for information to:

- 1 Dean (ECE)
- 2 Director Planning & Projects
- 3 Director Finance
- 4 Director, Procurement Cell
- 5 Ag. Resident Auditor



NED UNIVERSITY OF ENGINEERING & TECHNOLOGY PROCUREMENT CELL

Tele # 99261261-2291, (Ext. 2471) Fax # 99261255,

E-mail: dp@neduet.edu.pk

Director Procurement

"Say NO to Corruption"

No. DP/NED/145950/8008/2>

Dated: 26-10-2021

The Director Information Advertisement Government of Sindh, Information Department Directorate of Advertisement Karachi.

SUBJECT:

PUBLICATION OF NOTICE INVITING TENDER

Enclosed kindly find herewith the Notice Inviting Tender (NIT) for publication in three newspapers for job mentioned below:

	Design, Supply, Installation, Testing and commissioning of Solar System with
Notice	the Capacity of 100kWp Solar Power Solution on Main and Circulation Library
Inviting	at NED University of Engineering & Technology, Karachi.
Tender	Tender No. PC/NED/DWS/Solar/8008/2021

Kindly ensure the publication of the aforementioned NIT as under:

Name of Newspapers	Ordinary Page	Date of Publication
Daily "Dawn" - English Daily "Jang" - Urdu Daily "Awami Awaz" – Sindhi	Black & White	On or before 30-10-2021

The aforesaid NIT please be published on or before 30-10-2021. The bill along-with tear sheet of newspapers may be sent to Director Finance of this University for payment.

Copy to DF



Director Procure



NED UNIVERSITY OF ENGINEERING & TECHNOLOGY PROCUREMENT CELL

Phone #: 99261261-68, (Ext. 2471 & 2501) — Fax #: 99261255 — E-mail: dp@neduet.edu.pk

No. DP/Cos- 145950/Solar/8008/

October 26, 2021



Notice Inviting Tender

The Assignment

Sealed Bids based on "Single Stage-Two Envelope Procedure" are invited from the Manufacturers / Authorized Dealers / Distributors / Suppliers registered with Income Tax, GST and SRB for the following work:

Brief Scope of Work

Design, Supply, Installation, Testing and Commissioning of Solar System with the Capacity of 100k Wp Solar Power Solution on Main and Circulation Library at NED University of Engineering and Technology, Karachi.

Method

The bids shall comprise a single package containing two separate envelopes. Each envelope shall contain separately the "Financial Proposal" and the "Technical Proposal". Tender Documents can be purchased from ADP-II office & shall be opened as per below schedule in same office. Bid Security 5% of bid price which should be placed in Financial Proposal.

Eligibility:

- a) The bidder should have experience in design, manufacture, supply, installation and commissioning on-grid solar solutions in Pakistan and must have required licenses by regulatory authorities including AEDB and K Electric for the work.
- Details of turnover (Including in terms of Rupees) of at least last three years that Average turnover of at least last three

- years should not be less than Rs 22 million, as per online annual returns submitted to FBR.
- Valid Professional Tax Certificate issued from Government of Sindh. Valid Certification with AEDB for On-grid and hybrid renewal energy installations of capacity upto 1000 KW — Category ARE-VI
- Registration with (FBR) Sales Tax Department and Sindh Revenue Board (SRB).

Tender Schedule - Date and Time				Tender Fee Rs.
Issue / Sale		Submission	Opening	
From	То	Submission	Opening	
02-11-2021	23-11-2021		24-11-2021 10:30 A.M	2000/-

Tender fee in shape of pay order would be in favour of Director Finance, NEDUET. Bidding documents can also be obtained and shall be submitted in the office of ADP —II as per above schedule. Bidders are requested to give their Best and Final Price as "No Negotiation" is permitted. Bidding Documents containing detailed terms and conditions are available at Websites www.neduet.edu.pk and <a hr

Director Procurement

Say No to Corruption WEAR MASK-SAVE LIFE بالك فكا كرد كرواجها كي - بالك فكا كرد المؤوق إلى ماستان باليوريك كي الإلا - ماستان باليور معطوق وعو

INF-KRY No. 4048/21