

Quaid-i-Azam University



Tender No.

Invitation to Bids

1. Sealed tender on item rate F.O.R. Quaid-i-Azam University (QAU) is invited from well reputed firms registered with the FBR (NTN and GST) for the procurement of following solar systems in accordance with Public Procurement Rules 2004; 36 (b) single stage two envelop basis:
 - i. A Solar Photovoltaic (PV) On-Grid System with a rated capacity of 135 kWp at Standard Test Conditions (STC) and a 30kWp Hybrid Solar system with battery backup are planned for installation on the rooftop of Doctor Razi-ud-din Siddiqui Memorial Library (DRSM) QAU
2. Tender will be issued only to those firms who will have valid active registration with PPRA for procurement on EPADS. Tender documents can be obtained from office of undersigned till 22.04.2024 on payment of Rs.5000/- (through Bank Draft/Challan from University) as tender cost, during office hours, except holidays on written request from the firm concern on a letter head of the firm. Details of the job can be viewed on EPADS and PPRA also.
3. The interested bidders are requested to submit their bids / proposals online through EPADS at <https://eprocure.gov.pk> before opening date, and original bids / proposal must be submitted at Quaid-i-Azam University, Islamabad on or before 11:00AM on 23.04.2024 and will be opened on the same day at 11:30 am in the Committee Room of the University in the presence of suppliers / contractors or their authorized agents.
4. The rates must be quoted strictly in accordance with specification mentioned in the document and valid for 06 months.
5. The University reserves the right to accept / reject the tender (s) by conveying the reasons on request of bidders. The decision of the University on all matter relating to this tender shall be final.

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1. Introduction

1) Scope of bid	1.1	The Quaid-i-Azam University invites Bids for the provision of Goods as specified in the BDS and Section V - Technical Specifications & Schedule of Requirements. The successful Bidders will be expected to deliver the goods within the specified period and timeline(s) as stated in the BDS.
2) Source of funds	2.1	Source of funds is referred in Clause-2 of Invitation for Bids.
3) Eligible bidders	3.1	A Bidder may be natural person, company or firm or public or semi-public agency of Pakistan or any foreign country, or any combination of them with a formal existing agreement (on Judicial Papers) in the form of a joint venture, consortium, or association. In the case of a joint venture, consortium, or association, all members shall be jointly and severally liable for the execution of the Contract in accordance with the terms and conditions of the Contract. The joint venture, consortium, or association shall nominate a Lead Member as nominated in the BDS, who shall have the authority to conduct all business for and on behalf of any and all the members of the joint venture, consortium, or association during the Bidding process, and in case of award of contract, during the execution of contract.
	3.2	The appointment of Lead Member in the joint venture, consortium, or association shall be confirmed by submission of a valid Power of Attorney to the Procuring Agency.
	3.3	Verifiable copy of the agreement that forms a joint venture, consortium or association shall be required to be submitted as part of the Bid.
	3.4	Any bid submitted by the joint venture, consortium or association shall indicate the part of proposed contract to be performed by each party and each party shall be evaluated (or post qualified if required) with respect to its contribution only, and the responsibilities of each party shall not be substantially altered without prior written approval of the Procuring Agency and in line with any instructions issued by the Authority.
	3.5	The invitation for Bids is open to all prospective supplier, manufacturers or authorized agents/dealers subject to any provisions of incorporation or licensing by the respective national incorporating agency or statutory body established for that particular trade or business.
	3.6	Foreign Bidders must be locally registered with the appropriate national incorporating body or the statutory body, before participating in the national/international competitive tendering with the exception of such procurements made by the foreign missions of Pakistan. For such purpose the bidder must have to initiate the registration process before the bid submission and the necessary evidence shall be submitted to the procuring agency along with their bid, however, the final award will be subject to the complete registration process.
	3.7	A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidders may be considered to have a conflict of interest with one or more parties in this Bidding process, if they: <ul style="list-style-type: none"> a) a) are 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,

		<p>specifications and other documents to be used for the procurement of the goods to be purchased under this Invitation for Bids.</p> <p>b) have controlling shareholders in common; or</p> <p>c) receive or have received any direct or indirect subsidy from any of them; or</p> <p>d) have the same legal representative for purposes of this Bid; or</p> <p>e) have a relationship with each other, directly or</p> <p>f) through common third parties, that puts them in a position to have access to information about or</p> <p>g) influence on the Bid of another Bidder, or influence the decisions of the Procuring Agency regarding this Bidding process; or</p> <p>h) f) Submit more than one Bid in this Bidding process.</p>
	3.8	<p>A Bidder may be ineligible if –</p> <p>(a) he is declared bankrupt or, in the case of company or firm, insolvent;</p> <p>(b) payments in favor of the Bidder is suspended in accordance with the judgment of a court of law other than a judgment declaring bankruptcy and resulting (in accordance with the national laws) in the total or partial loss of the right to administer and dispose of its property;</p> <p>(c) legal proceedings are instituted against such Bidder involving an order suspending payments and which may result, in accordance with the national laws, in a declaration of bankruptcy or in any other situation entailing the total or partial loss of the right to administer and dispose of the property;</p> <p>(d) the Bidder is convicted, by a final judgment, of any offence involving professional conduct;</p> <p>(e) The Bidder is blacklisted and hence debarred due to involvement in corrupt and fraudulent practices, or performance failure or due to breach of bid securing declaration.</p> <p>(f) The firm, supplier and contractor is blacklisted or debarred by a foreign country, international organization, or other foreign institutions for the period defined by them.</p>
	3.9	Bidders shall provide to the Procuring Agency evidence of their eligibility, proof of compliance with the necessary legal requirements to carry out the contract effectively.
	3.10	Bidders shall provide such evidence of their continued eligibility to the satisfaction of the Procuring Agency, as the Procuring Agency shall reasonably request.
	3.11	Bidders shall submit proposals relating to the nature, conditions and modalities of sub-contracting wherever the sub-contracting of any elements of the contract amounting to the more than ten (10) percent of the Bid price is envisaged.
4) Eligible Goods and Related Services	4.1	All goods and related services to be supplied under the contract shall have their origin in eligible source countries, and all expenditures made under the contract will be limited to such goods and services. For purpose of this Bid, ineligible countries are stated in the section-4 titled as “Eligible Countries”.

	4.2	For purposes of this Clause, “origin” means the place where the goods are mined, grown, cultivated, produced, manufactured, or processed, or through manufacture, procession, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its imported components or the place from where the related services are/to be supplied.
	4.3	The nationality of the supplier that supplies, assembles, distributes, or sells the goods and services shall not determine the origin of the goods.
	4.4	To establish the eligibility of the Goods and the related services, Bidders shall fill the country of origin declarations included in the Form of Bid.
	4.5	If so required in the BDS, the Bidder shall demonstrate that it has been duly authorized by the manufacturer of the goods to deliver in Pakistan the goods indicated in its Bid
5) One bid per bidder	5.1	A bidder shall submit only one Bid, in the same bidding process, either individually as a Bidder or as a member in a joint venture or any similar arrangement.
	5.2	No bidder can be a sub-contractor while submitting a Bid individually or as a member of a joint venture in the same Bidding process.
	5.3	A person or a firm cannot be a sub-contractor with more than one bidder in the same bidding process.
6) Cost of bidding	6.1	The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Procuring Agency shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

2. Bidding Documents

7) Contents of bidding documents	7.1	The goods required, bidding procedures, and terms and conditions of the contract are prescribed in the Bidding Documents. In addition to the Invitation to Bids, the Bidding Documents which should be read in conjunction with any addenda issued in accordance with ITB 9.2 include: Section I -Invitation to Bids Section II Instructions to Bidders (ITBs) Section III Bid Data Sheet (BDS) Section IV Eligible Countries Section V Technical Specifications, Schedule of Requirements Section VI Forms – Bid Section VII General Conditions of Contract (GCC) Section VIII Special Conditions of Contract (SCC) Section IX Contract Forms
	7.2	The number of copies to be completed and returned with the Bid is specified in the BDS.
	7.3	The Procuring Agency is not responsible for the completeness of the Bidding Documents and their addenda, if they were not obtained directly from the Procuring Agency or the signed pdf version from downloaded from the website of the Procuring Agency. However, Procuring Agency shall place both the pdf and same editable version to facilitate the bidder for filling the forms
	7.4	The Bidder is expected to examine all instructions, forms, terms and specifications in the Bidding Documents. Failure to furnish all

		the information required in the Bidding Documents will be at the Bidder's risk and may result in the rejection of his Bid
8) Clarification of the bidding documents	8.1	A prospective Bidder requiring any clarification of the Bidding Documents may notify the Procuring Agency in writing or in electronic form that provides record of the content of communication at the Procuring Agency's address indicated in the BDS.
	8.2	The Procuring Agency will within three (3) working days after receiving the request for clarification, respond in writing or in electronic form to any request for clarification provided that such request is received not later than three (03) days prior to the deadline for the submission of Bids as prescribed in ITB 23.1. However, this clause shall not apply in case of alternate methods of Procurement.
	8.3	Copies of the Procuring Agency's response will be forwarded to all identified Prospective Bidders through an identified source of communication, including a description of the inquiry, but without identifying its source. In case of downloading of the Bidding Documents from the website of PA, the response of all such queries will also be available on the same link available at the website.
	8.4	Should the Procuring Agency deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under ITB 9.
	8.5	If indicated in the BDS, the Bidder's designated representative is invited at the Bidder's cost to attend a pre-Bid meeting at the place, date and time mentioned in the BDS. During this pre-Bid meeting, prospective Bidders may request clarification of the schedule of requirement, the Evaluation Criteria or any other aspects of the Bidding Documents.
	8.6	Minutes of the pre-Bid meeting , if applicable, including the text of the questions asked by Bidders, including those during the meeting (without identifying the source) and the responses given, together with any responses prepared after the meeting will be transmitted promptly to all prospective Bidders who have obtained the Bidding Documents. Any modification to the Bidding Documents that may become necessary as a result of the pre-Bid meeting shall be made by the Procuring Agency exclusively through the use of an Addendum pursuant to ITB 9. Non-attendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.
9) Amendment of Bidding Documents	9.1	Before 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 prospective Bidder or pre-Bid meeting may modify the Bidding Documents by issuing addenda.
	9.2	Any addendum issued including the notice of any extension of the deadline shall be part of the Bidding Documents pursuant to ITB 7.1 and shall be communicated in writing or in any identified electronic form that provide record of the content of communication to all the bidders who have obtained the Bidding Documents from the Procuring Agency. The Procuring Agency shall promptly publish the Addendum at the Procuring Agency's web page identified in the BDS: Provided that the bidder who had either already submitted their bid or handed over the bid to the courier prior to the issuance of any such addendum shall have the right to withdraw his already filed bid and submit the revised bid prior to the original or extended bid submission deadline.

	9.3	To give prospective Bidders reasonable time in which to take an addendum/corrigendum into account in preparing their Bids, the Procuring Agency may, at its discretion, extend the deadline for the submission of Bids: Provided that the Procuring Agency shall extend the deadline for submission of Bid, if such an addendum is issued within last three (03) days of the Bid submission deadline.
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3. Preparation of bids

10) Language of bids	10.1	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 unless specified in the BDS. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant pages in the English language unless specified in the BDS, in which case, for purposes of interpretation of the Bidder, the translation shall govern
11) Documents and sample(s) constituting the bid	11.1	The Bid prepared by the Bidder shall constitute the following components: - <ul style="list-style-type: none"> a) Form of Bid and Bid Prices completed in accordance with ITB 14 and 15; b) Details of the Sample(s) where applicable and requested in the BDS. c) Documentary evidence established in accordance with ITB 13 that the Bidder is eligible and/or qualified for the subject bidding process; d) Documentary evidence established in accordance with ITB 13.3(a) that the Bidder has been authorized by the manufacturer to deliver the goods into Pakistan, where required and where the supplier is not the manufacturer of those goods; e) Documentary evidence established in accordance with ITB 12 that the goods and related services to be supplied by the Bidder are eligible goods and services, and conform to the Bidding Documents; f) Bid security or Bid Securing Declaration furnished in accordance with ITB 18; g) Duly Notarized Power of Attorney authorizing the signatory of the Bidder to submit the bid; and h) Any other document required in the BDS.
	11.2	Where a sample(s) is required by a procuring agency, the sample shall be: <ul style="list-style-type: none"> a) submitted as part of the bid, in the quantities, dimensions and other details requested in the BDS; b) carriage paid; c) received on, or before, the closing time and date for the submission of bids; and d) evaluated to determine compliance with all characteristics listed in the BDS.
	11.3	The Procuring Agency shall retain the sample(s) of the successful Bidder. A Procuring Agency shall reject the Bid if the sample(s)- <ul style="list-style-type: none"> a) do(es) not conform to all characteristics prescribed in the bidding documents; and b) Is/are not submitted within the specified time clearly mentioned in the Bid Data Sheet.

	11.4	Where it is not possible to avoid using a propriety article as a sample, a Bidder shall make it clear that the propriety article is displayed only as an example of the type or quality of the goods being Bided for, and that competition shall not thereby be limited to the extent of that article only.
	11.5	Samples made up from materials supplied by a Procuring Agency shall not be returned to a Bidder nor shall a Procuring Agency be liable for the cost of making them.
	11.6	All samples produced from materials belonging to an unsuccessful Bidder shall be kept by the Procuring Agency till thirty (30) days from the date of award of contract or exhaust of all the grievance forums (including those pending at Authority's Level or in some Court of Law).
12) Documents Establishing Eligibility of Goods and Related Services and Conformity to Bidding Documents	12.1	Pursuant to ITB 11, the Bidder shall furnish, as part of its Bid, all those documents establishing the eligibility in conformity to the terms and conditions specified in the Bidding Documents for all goods and related services which the Bidder proposes to deliver.
	12.2	The documentary evidence of the eligibility of the goods and related services shall consist of a statement in the Price Schedule of the country of origin of the goods and related services offered which shall be confirmed by a certificate of origin issued at the time of shipment.
	12.3	12.3 The documentary evidence of conformity of the goods and related services to the Bidding Documents may be in the form of literature, drawings, and data, and shall consist of: <ul style="list-style-type: none"> 1) a detailed description of the essential technical specifications and performance characteristics of the Goods; 2) an item-by-item commentary on the Procuring Agency's Technical Specifications demonstrating substantial responsiveness of the Goods and Services to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications; 3) any other procurement specific documentation requirement as stated in the BDS.
	12.4	The Bidder shall also furnish a list giving full particulars, including available sources and current prices of goods, spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods during the period specified in the BDS following commencement of the use of the goods by the Procuring Agency.
	12.5	For purposes of the commentary to be furnished pursuant to ITB 12.3(c) above, 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 Specifications, are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names, and/or catalogue numbers in its Bid, provided that it demonstrates to the Procuring Agency's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.
	12.6	The required documents and other accompanying documents must be in English. In case any other language than English is used the pertinent translation into English shall be attached to the original version.
13) Documents Establishing	13.1	Pursuant to ITB 11, the Bidder shall furnish, as part of its Bid, all those documents establishing the Bidder's eligibility to participate in the bidding process and/or its qualification to perform the contract if

g Eligibility and Qualification of the Bidder		its Bid is accepted.
	13.2	The documentary evidence of the Bidder's eligibility to Bid shall establish to the satisfaction of the Procuring Agency that the Bidder, at the time of submission of its bid, is from an eligible country as defined in Section-4 titled as "Eligible Countries".
	13.3	The documentary evidence of the Bidder's qualifications to perform the contract if its Bid is accepted shall establish to the satisfaction of Procuring Agency that: <ol style="list-style-type: none"> 1) in the case of a Bidder offering to deliver goods under the contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' Manufacturer or producer to deliver the goods in Pakistan; 2) The Bidder has the financial, technical, and supply/production capability necessary to perform the Contract, meets the qualification criteria specified in BDS. 3) in the case of a Bidder not doing business within Pakistan, the Bidder is or will be (if awarded the contract) represented by an Agent in Pakistan equipped, and able to carry out the Supplier's maintenance, repair, and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications. 4) That the Bidder meets the qualification criteria listed in the Bid Data Sheet.
14)Form of bid	14.1	The Bidder shall fill the Form of Bid furnished in the Bidding Documents. The Bid Form must be completed without any alterations to its format and no substitute shall be accepted.
15)Bid price	15.1	The Bid Prices and discounts quoted by the Bidder in the Form of Bid and in the Price Schedules shall conform to the requirements specified below in ITB Clause 15 or exclusively mentioned hereafter in the bidding documents.
	15.2	All items in the Statement of Work must be listed and priced separately in the Price Schedule(s). If a Price Schedule shows items listed but not priced, their prices shall be construed to be included in the prices of other items.
	15.3	Items not listed in the Price Schedule shall be assumed not to be included in the Bid, and provided that the Bid is still substantially responsive in their absence or due to their nominal nature, the corresponding average price of the respective item(s) of the remaining substantially responsive bidder(s) shall be construed to be the price of those missing item(s): Provided that: <ol style="list-style-type: none"> a. where there is only one (substantially) responsive bidder, or b. where there is provision for alternate proposals and the respective items are not listed in the other bids, the procuring agency may fix the price of missing items in accordance with market survey, and the same shall be considered as final price.
	15.4	The Bid price to be quoted in the Form of Bid in accordance with ITB 15.1 shall be the total price of the Bid, excluding any discounts offered.
	15.5	The Bidder shall indicate on the appropriate Price Schedule, the unit prices (where applicable) and total Bid price of the goods it proposes to deliver under the contract.
	15.6	Prices indicated on the Price Schedule shall be entered separately in the following manner:

	<p>a) For goods manufactured from within Pakistan (or within the country where procurement is being done in case of foreign missions abroad):</p> <ol style="list-style-type: none"> i. the price of the goods quoted including all customs duties and sales and other taxes already paid or payable: ii. All applicable taxes which will be payable on the goods if the contract is awarded. iii. The price for inland transportation, insurance, and other local costs incidental to delivery of the goods to their final destination, if specified in the BDS. iv. The price of other (incidental or allied) services, if any, listed in the BDS. <p>b) For goods offered from abroad:</p> <ol style="list-style-type: none"> i. The price of the goods shall be quoted CIF named port of destination, or CIP border point, or CIP named place of destination, in the Procuring Agency's country, as specified in the BDS. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible countries. Similarly, the Bidder may obtain insurance services from any eligible source country. or ii. The price of the goods quoted FOB port of shipment (or FCA, as the case may be), if specified in the BDS. or iii. The price of goods quoted CFR port of destination (or CPT as the case may be), if specified in the BDS. iv. The price for inland transportation, insurance, and other local costs incidental to delivery of the goods from the port of entry to their final destination, if specified in the BDS. v. The price of (incidental) services, if any, listed in the BDS.
15.7	<p>Prices proposed on the Price Schedule for goods and related services shall be disaggregated, where appropriate as indicated in this Clause. This desegregation shall be solely for the purpose of facilitating the comparison of Bids by the Procuring Agency. This, shall not in any way limit the Procuring Agency's right to contract on any of the terms and conditions offered: -</p> <p>a) For Goods: -</p> <ol style="list-style-type: none"> i. the price of the Goods, quoted as per applicable INCOTERMS as specified in the BDS ii. ii) all customs duties, sales tax, and other taxes applicable on goods or on the components and raw materials used in their manufacture or assembly, if the contract is awarded to the Bidder, and <p>b) For Related Services</p> <ol style="list-style-type: none"> i. The price of the related services, and ii. ii) All customs duties, sales tax and other taxes applicable in Pakistan, paid or payable, on the related services, if the contract is awarded to the Bidder.
15.8	<p>Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account. A Bid submitted with an adjustable price will be treated as non-responsive and shall be rejected, pursuant to ITB 28.</p>
15.9	<p>15.9 If so indicated in the Invitation to Bids and Instructions to Bidders, that Bids are being invited for individual contracts (Lots) or for any combination of contracts (packages), Bidders wishing to offer any price reduction for the award of more than one contract shall specify in their Bid the price reductions applicable to</p>

		each package, or alternatively, to individual contracts (Lots) within a package.
16) Bid Currencies	16.1	Prices shall be quoted in the following currencies: a. For goods and services that the Bidder will deliver from within Pakistan, the prices shall be quoted in Pakistani Rupees, unless otherwise specified in the BDS. b. For goods and related services that the Bidder will deliver from outside Pakistan, or for imported parts or components of goods and related services originating outside Pakistan, the Bid prices shall be quoted in any freely convertible currency of another country. If the Bidder wishes to be paid in a combination of amounts in different currencies, it may quote its price accordingly but use no more than three foreign currencies
	16.2	For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency specified in the bidding documents. The rate of exchange shall be the selling rate, prevailing on the date of opening of (financial part of) bids specified in the bidding documents, as notified by the State Bank of Pakistan on that day.
	16.3	Bidders shall indicate details of their expected foreign currency requirements in the Bid.
	16.4	Bidders may be required by the Procuring Agency to clarify their foreign currency requirements and to substantiate that the amounts included in Lump Sum and in the SCC are reasonable and responsive to ITB 16.1
17) Bid Validity Period	17.1	Bids shall remain valid for the period specified in the BDS after the Bid submission deadline prescribed by the Procuring Agency. A Bid valid for a shorter period shall be rejected by the Procuring Agency as non-responsive. The period of Bid validity will be determined from the complementary bid securing instrument i.e. the expiry period of bid security or bid securing declaration as the case may be
	17.2	Under exceptional circumstances, prior to the expiration of the initial Bid validity period, the Procuring Agency may request the Bidders' consent to an extension of the period of validity of their Bids only once, for the period not more than the period of initial bid validity. The request and the Bidders responses shall be made in writing or in electronic forms that provide record of the content of communication. The Bid Security provided under ITB 18 shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid security or causing to be executed its Bid Securing Declaration. A Bidder agreeing to the request will not be required nor permitted to modify its Bid, but will be required to extend the validity of its Bid Security or Bid Securing Declaration
	17.3	If the award is delayed by a period exceeding sixty (60) days beyond the expiry of the initial Bid validity period, the contract price may be adjusted by a factor specified in the request for extension. However, the Bid evaluation shall be based on the already quoted Bid Price without taking into consideration on the above correction.
18) Bid Security or Bid Securing Declaration	18.1	Pursuant to ITB 11 , unless otherwise specified in the BDS, the Bidder shall furnish as part of its Bid, a Bid Security in form of fixed amount not exceeding five percent of the estimated value of procurement determined by the procuring agency and in the amount and currency specified in the BDS or Bid Securing Declaration as specified in the BDS in the format provided in Section VI (Standard Forms).

18.2	The Bid Security or Bid Securing Declaration is required to protect the Procuring Agency against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to ITB 18.9.
18.3	<p>The Bid Security shall be denominated in the local currency or in another freely convertible currency, and it shall be in the form specified in the BDS which shall be in any of the following:</p> <ul style="list-style-type: none"> a. a bank guarantee, an irrevocable letter of credit issued by a Scheduled bank in the form provided in the Bidding Documents or another form acceptable to the Procuring Agency and valid for twenty-eight (28) days beyond the end of the validity of the Bid. This shall also apply if the period for Bid Validity is extended. In either case, the form must include the complete name of the Bidder; b) a cashier's or certified cheque; or c) another security if indicated in the BDS
18.4	The Bid Security or Bid Securing Declaration shall be in accordance with the Form of the Bid Security or Bid Securing Declaration included in Section VI (Standard Forms) or another form approved by the Procuring Agency prior to the Bid submission
18.5	The Bid Security shall be payable promptly upon written demand by the Procuring Agency in case any of the conditions listed in ITB 18.9 are invoked
18.6	Any Bid not accompanied by a Bid Security or Bid Securing Declaration in accordance with ITB 18.1 or 18.3 shall be rejected by the Procuring Agency as non-responsive, pursuant to ITB 28.
18.7	<p>18.7 Unsuccessful Bidders' Bid Security will be discharged or returned as promptly as possible, however in no case later than thirty (30) days after the expiration of the period of Bid Validity prescribed by the Procuring Agency pursuant to ITB 17. The Procuring Agency shall make no claim to the amount of the Bid Security, and shall promptly return the Bid Security document, after whichever of the following that occurs earliest:</p> <ul style="list-style-type: none"> a. the expiry of the Bid Security; b. the entry into force of a procurement contract and the provision of a performance security (or guarantee), for the performance of the contract if such a security (or guarantee), is required by the Bidding documents; c. the rejection by the Procuring Agency of all Bids; d. the withdrawal of the Bid prior to the deadline for the submission of Bids, unless the Bidding documents stipulate that no such withdrawal is permitted.
18.8	The successful Bidder's Bid Security will be discharged upon the Bidder signing the contract pursuant to ITB 41, or furnishing the performance security (or guarantee), pursuant to ITB 42.
18.9	<p>The Bid Security may be forfeited or the Bid Securing Declaration executed:</p> <ul style="list-style-type: none"> a) if a Bidder: <ul style="list-style-type: none"> i) withdraws its Bid during the period of Bid Validity <p>as specified by the Procuring Agency, and referred by the bidder on the Form of Bid except as provided for in ITB 17.2; or</p> <ul style="list-style-type: none"> ii) does not accept the correction of errors pursuant to ITB 30.3; or b) in the case of a successful Bidder, if the Bidder fails: <ul style="list-style-type: none"> i) to sign the contract in accordance with ITB 41; or ii) to furnish performance security (or guarantee) in accordance

		with ITB 42.
19) Alternative Bids by Bidders	19.1	Bidders shall submit offers that comply with the requirements of the Bidding Documents, including the basic Bidder's technical design as indicated in the specifications and Schedule of Requirements. Alternatives will not be considered, unless specifically allowed for in the BDS. If so allowed, ITB 19.2 shall prevail.
	19.2	When alternative schedule for delivery of goods is explicitly invited, a statement of that effect will be included in the BDS as will the method for evaluating different schedule for delivery of goods.
	19.3	If so allowed in the BDS, Bidders wishing to offer technical alternatives to the requirements of the Bidding Documents must also submit a Bid that complies with the requirements of the Bidding Documents, including the basic technical design as indicated in the specifications. In addition to submitting the basic Bid, the Bidder shall provide all information necessary for a complete evaluation of the alternative by the Procuring Agency, including technical specifications, breakdown of prices, and other relevant details. Only the technical alternatives, if any, of the Most Advantageous Bidder conforming to the basic technical requirements (without altering the bid price) shall be considered by the Procuring Agency.
20) Withdrawal, Substitution, and Modification of	20.1	Before bid submission deadline, any bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by a Bids authorized representative, and the corresponding substitution or modification must accompany the respective written notice.
	20.2	Bids requested to be withdrawn in accordance with ITB 20.1 shall be returned unopened to the Bidders.
21) Format and Signing of Bid	21.1	The Bidder shall prepare an original and the number of copies of the Bid as indicated in the BDS, clearly marking each "ORIGINAL" and "COPY," as appropriate. In the event of any discrepancy between them, the original shall prevail: Provided that except in Single Stage One Envelope Procedure, the Bid shall include only the copies of technical proposal
	21.2	The original and the copy or copies of the Bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid, except for un-amended printed literature, shall be initialed by the person or persons signing the Bid.
	21.3	Any interlineations, erasures, or overwriting shall be valid only if they are signed by the person or persons signing the Bidder.

4. Submission of bids

22) Sealing and Marking of Bids	22.1	In case of Single Stage One Envelope Procedure, the Bidder shall seal the original and each copy of the Bid in separate envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." The envelopes shall then be sealed in an outer envelope securely sealed in such a manner that opening and resealing cannot be achieved undetected. Note: The envelopes shall be sealed and marked in accordance with the bidding procedure adopted as referred in Rule-36 of PPR-
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	22.2	The inner and outer envelopes shall: a) be addressed to the Procuring Agency at the address given in the BDS; and b) bear the title of the subject procurement or Project name, as the case may be as indicated in the BDS, the Invitation to Bids (ITB) title and number indicated in the BDS, and a statement: "DO NOT OPEN BEFORE," to be completed with the time and the date specified in the BDS, pursuant to ITB 23.1.
	22.3	In case of Single Stage Two Envelope Procedure, The Bid shall comprise two envelopes submitted simultaneously, one called the Technical Proposal and the other Financial Proposal. Both envelopes to be enclosed together in an outer single envelope called the Bid. Each Bidder shall submit his bid as under: a. Bidder shall submit his TECHNICAL PROPOSAL and FINANCIAL PROPOSAL in separate inner envelopes and enclosed in a single outer envelope. b. ORIGINAL and each copy of the Bid shall be separately sealed and put in separate envelopes and marked as such. c. The envelopes containing the ORIGINAL and copies will be put in one sealed envelope and addressed / identified as given in Sub- Clause 21.2.
	22.4	The inner and outer envelopes shall: a. be addressed to the Procuring Agency at the address provided in the Bidding Data; b. bear the name and identification number of the contract as defined in the Bidding Data; and provide a warning not to open before the time and date for bid opening, as specified in the Bidding Data. Pursuant to ITB 23.1. c. In addition to the identification required in Sub- Clause 21.2 hereof, the inner envelope shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared "late" pursuant to Clause IB.24
	22.5	If all envelopes are not sealed and marked as required by ITB 22.2 , ITB 22.3 and ITB 22.4 or incorrectly marked, the Procuring Agency will assume no responsibility for the misplacement or premature opening of Bid.
23)Deadline for submission of bids	23.1	Bids shall be received by the Procuring Agency no later than the date and time specified in the BDS.
	23.2	The Procuring Agency may, in exceptional circumstances and at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with ITB 9, in which case all rights and obligations of the Procuring Agency and Bidders previously subject to the deadline will thereafter be subject to the new deadline.
24)Late bids	24.1	The Procuring Agency shall not consider for evaluation any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 23.
	24.2	Any Bid received by the Procuring Agency after the deadline for submission of Bids shall be declared late, recorded, rejected and returned unopened to the Bidder.
25)Withdrawal of bids	25.1	A Bidder may withdraw its Bid after it has been submitted, provided that written notice of the withdrawal of the Bid is received by the Procuring Agency prior to the deadline for submission of Bids.
	25.2	Revised bid may be submitted after the withdrawal of the original

		bid in accordance with the provisions referred in ITB 22.
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5. Opening and Evaluation of bids

26) Opening of bids	26.1	The Procuring Agency will open all Bids, in public, in the presence of Bidders' or their representatives who choose to attend, and other parties with a legitimate interest in the Bid proceedings at the place, on the date and at the time, specified in the BDS. The Bidders' representatives present shall sign a register as proof of their attendance
	26.2	First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding Withdrawal Notice contains a valid authorization to request the withdrawal and is read out at bid opening.
	26.3	26.3 Second, outer envelopes marked "SUBSTITUTION" shall be opened. The inner envelopes containing the Substitution Bid shall be exchanged for the corresponding Original Bid being substituted, which is to be returned to the Bidder unopened. No envelope shall be substituted unless the corresponding Substitution Notice contains a valid authorization to request the substitution and is read out and recorded at bid opening.
	26.4	Next, outer envelopes marked "MODIFICATION" shall be opened. No Technical Proposal and/or Financial Proposal shall be modified unless the corresponding Modification Notice contains a valid authorization to request the modification and is read out and recorded at the opening of the Bids. Any Modification shall be read out along with the Original Bid except in case of Single Stage Two Envelope Procedure where only the Technical Proposal, both Original as well as Modification, are to be opened, read out, and recorded at the opening. Financial Proposal, both Original and Modification, will remain unopened till the prescribed financial bid opening date
	26.5	Other envelopes holding the Bids shall be opened one at a time, in case of Single Stage One Envelope Procedure, the Bidders names, the Bid prices, the total amount of each Bid and of any alternative Bid (if alternatives have been requested or permitted), any discounts, the presence or absence of Bid Security, Bid Securing Declaration and such other details as the Procuring Agency may consider appropriate, will be announced by the Procurement Evaluation Committee.
	26.6	In case of Single Stage Two Envelope Procedure, the Procuring Agency will open the Technical Proposals in public at the address, date and time specified in the BDS in the presence of Bidders' designated representatives who choose to attend and other parties with a legitimate interest in the Bid proceedings. The Financial Proposals will remain unopened and will be held in custody of the Procuring Agency until the specified time of their opening.
	26.7	The envelopes holding the Technical Proposals shall be opened one at a time, and the following read out and recorded: (a) the name of the Bidder; (b) whether there is a modification or substitution; (c) the presence of a Bid Security, if required; and (d) Any other details as the Procuring Agency may consider appropriate
	26.8	Bids not opened and not read out at the Bid opening shall not be considered further for evaluation irrespective of the

		circumstances. In particular, any discount offered by a Bidder which is not read out at Bid opening shall not be considered further
	26.9	Bidders are advised to send in a representative with the knowledge of the content of the Bid who shall verify the information read out from the submitted documents. Failure to send a representative or to point out any un-read information by the sent Bidder's representative shall indemnify the Procuring Agency against any claim or failure to read out the correct information contained in the Bidder's Bid.
	26.10	No Bid will be rejected at the time of Bid opening except for late Bids which will be returned unopened to the Bidder, pursuant to ITB 24.
	26.11	The Procuring Agency shall prepare minutes of the Bid opening. The record of the Bid opening shall include, as a minimum: the name of the Bidder and whether or not there is a withdrawal, substitution or modification, the Bid price if applicable, including any discounts and alternative offers and the presence or absence of a Bid Security or Bid Securing Declaration.
	26.12	The Bidders' representatives who are present shall be requested to sign on the attendance sheet. The omission of a Bidder's signature on the record shall not invalidate the contents and affect the record. A copy of the record shall be distributed to all the Bidders.
	26.13	A copy of the minutes of the Bid opening shall be furnished to individual Bidders upon request.
	26.14	In case of Single Stage Two Envelop Bidding Procedure, after the evaluation and approval of technical proposal the procuring agency, shall at a time within the bid validity period, publically open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically non-responsive shall be returned un-opened to the respective bidders subject to redress of the grievances from all tiers of grievances
27) Confidentiality	27.1	Information relating to the examination, clarification, evaluation and comparison of Bids and recommendation of contract award shall not be disclosed to Bidders or any other persons not officially concerned with such process until the time of the announcement of the respective evaluation report.
	27.2	Any effort by a Bidder to influence the Procuring Agency processing of Bids or award decisions may result in the rejection of its Bid
	27.3	Not with standing ITB 27.2 from the time of Bid opening to the time of contract award, if any Bidder wishes to contact the Procuring Agency on any matter related to the Bidding process, it should do so in writing or in electronic forms that provides record of the content of communication.
28) Clarification of bids	28.1	28.1 To assist in the examination, evaluation and comparison of Bids (and post-qualification if applicable) of the Bidders, the Procuring Agency may, ask any Bidder for a clarification of its Bid including breakdown of prices. Any clarification submitted by a Bidder that is not in response to a request by the Procuring Agency shall not be considered.
	28.2	28.2 The request for clarification and the response shall be in writing or in electronic forms that provide record of the content of communication. In case of Single Stage Two Envelope Procedure, no change in the prices or substance of the Bid shall be sought, offered, or permitted, whereas in case of Single Stage One Envelope Procedure, only the correction of arithmetic errors discovered by the Procuring Agency

		in the evaluation of Bids should be sought in accordance with ITB 31.
	28.3	The alteration or modification in THE BID which in any affect the following parameters will be considered as a change in the substance of a bid: <ul style="list-style-type: none"> a. evaluation & qualification criteria; b. required scope of work or specifications; c. all securities requirements; d. tax requirements; e. terms and conditions of bidding documents. f. change in the ranking of the bidder
	28.4	From the time of Bid opening to the time of Contract award if any Bidder wishes to contact the Procuring Agency on any matter related to the Bid it should do so in writing or in electronic forms that provide record of the content of communication.
29) Preliminary Examination of Bids	29.1	Prior to the detailed evaluation of Bids, the Procuring Agency will determine whether each Bid: <ul style="list-style-type: none"> a) meets the eligibility criteria defined in ITB 3 and ITB 4; b) has been prepared as per the format and contents defined by the Procuring Agency in the Bidding Documents; c) has been properly signed; d) is accompanied by the required securities; and e) is substantially responsive to the requirements of the Bidding Documents <p>The Procuring Agency's determination of a Bid's responsiveness will be based on the contents of the Bid itself.</p>
	29.2	A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bidding Documents, without material deviation or reservation. A material deviation or reservation is one that: - <ul style="list-style-type: none"> a) affects in any substantial way the scope, quality, or performance of the Services; b) limits in any substantial way, inconsistent with the Bidding Documents, the Procuring Agency's rights or the Bidders obligations under the Contract; o c) if rectified, would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids
	29.3	The Procuring Agency will confirm that the documents and information specified under ITB 11, 12 and 13 have been provided in the Bid. If any of these documents or information is missing, or is not provided in accordance with the Instructions to Bidders, the Bid shall be rejected
	29.4	The Procuring Agency may waive off any minor informality, nonconformity, or irregularity in a Bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder. Explanation: A minor informality, non-conformity or Irregularity is one that is merely a matter of form and not of substance. It also pertains to some immaterial defect in a Bid or variation of a bid from the exact requirements of the invitation that can be corrected or waived without being prejudicial to other bidders. The defect or variation is immaterial when the effect on quantity, quality, or delivery is negligible when contrasted with the

		<p>total cost or scope of the supplies or services being acquired. The Procuring Agency either shall give the bidder an opportunity to cure any deficiency resulting from a minor informality or irregularity in a bid or waive the deficiency, whichever is advantageous to the Procuring Agency. Examples of minor informalities or irregularities include failure of a bidder to –</p> <ol style="list-style-type: none"> a. Submit the number of copies of signed bids required by the invitation; b. Furnish required information concerning the number of its employees; c. the firm submitting a bid has formally adopted or authorized, before the date set for opening of bids, the execution of documents by typewritten, printed, or stamped signature and submits evidence of such authorization and the bid carries such a signature.
	29.5	<p>Provided that a Technical Bid is substantially responsive, the Procuring Agency may request the Bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Technical Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any such aspect of the technical Proposal linked with the ranking of the bidders. Failure of the Bidder to comply with the request may result in the rejection of its Bid.</p>
	29.6	<p>Provided that a Technical Bid is substantially responsive, the Procuring Agency shall rectify quantifiable nonmaterial nonconformities or omissions related to the Financial Proposal. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of the missing or nonconforming item or component</p>
	29.7	<p>If a Bid is not substantially responsive, it will be rejected by the Procuring Agency and may not subsequently be evaluated for complete technical responsiveness.</p>
30) Examination of Terms and Conditions; Technical Evaluation	30.1	<p>The Procuring Agency shall examine the Bid to confirm that all terms and conditions specified in the GCC and the SCC have been accepted by the Bidder without any material deviation or reservation.</p>
	30.2	<p>The Procuring Agency shall evaluate the technical aspects of the Bid submitted in accordance with ITB 22, to confirm that all requirements specified in Section V – Schedule of Requirements, Technical Specifications of the Bidding Documents have been met without material deviation or reservation.</p>
	30.3	<p>If after the examination of the terms and conditions and the technical evaluation, the Procuring Agency determines that the Bid is not substantially responsive in accordance with ITB 29, it shall reject the Bid.</p>
31) Corrections of errors	31.1	<p>Bids determined to be substantially responsive will be checked for any arithmetic errors. Errors will be corrected as follows: -</p> <ol style="list-style-type: none"> a) if there is a discrepancy between unit prices and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected, unless in the opinion of the Procuring Agency there is an obvious misplacement of the decimal point in the unit price, in which the total price as quoted shall govern and the unit price shall be corrected; b) if there is an error in a total corresponding to the addition or

		<p>subtraction of sub-totals, the sub-totals shall prevail and the total shall be corrected; and</p> <p>c) Where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.</p>
	31.2	The amount stated in the Bid will, be adjusted by the Procuring Agency in accordance with the above procedure for the correction of errors and, with, the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount, its Bid will then be rejected, and the Bid Security may be forfeited or the Bid Securing Declaration may be executed in accordance with ITB 18.9.
32) Conversion of single currency	32.1	To facilitate evaluation and comparison, the Procuring Agency will convert all Bid prices expressed in the amounts in various currencies in which the Bid prices are payable. For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency specified in the bidding documents. The rate of exchange shall be the selling rate, prevailing on the date of opening of (financial part of) bids specified in the bidding documents, as notified by the State Bank of Pakistan on that day
	32.2	The currency selected for converting Bid prices to a common base for the purpose of evaluation, along with the source and date of the exchange rate, are specified in the BDS.
33) Evaluation of bids	33.1	The Procuring Agency shall evaluate and compare only the Bids determined to be substantially responsive, pursuant to ITB 29.
	33.2	In evaluating the Technical Proposal of each Bid, the Procuring Agency shall use the criteria and methodologies listed in the BDS and in terms of Statement of Requirements and Technical Specifications. No other evaluation criteria or methodologies shall be permitted.
	33.3	<p>33.2 The Procuring Agency's evaluation of a Bid will take into account:</p> <p>a) in the case of goods manufactured in Pakistan or goods of foreign origin already imported in Pakistan, Income Tax, General Sales Tax and other similar/applicable taxes, which will be payable on the goods if a contract is awarded to the Bidder;</p> <p>b) in the case of goods of foreign origin offered from abroad, customs duties and other similar import taxes which will be payable on the goods if the contract is awarded to the Bidder; and</p>
	33.4	<p>33.3 The comparison shall be between the EXW price of the goods offered from within Pakistan, such price to include all costs, as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the goods, and named port of destination, border point, or named place of destination) in accordance with applicable INCOTERM in the price of the goods offered from outside Pakistan.</p> <p>In evaluating the Bidders, the evaluation committee will, in addition to the Bid price quoted in accordance with ITB 15.1, take account of one or more of the following factors as specified in the BDS, and quantified in ITB 32.5:</p> <p>a) Cost of inland transportation, insurance, and other costs within the Pakistan incidental to delivery of the goods to their final destination.</p> <p>b) delivery schedule offered in the Bid;</p> <p>c) deviations in payment schedule from that specified in the</p>

		<p>Special Conditions of Contract;</p> <p>d) the cost of components, mandatory spare parts, and service;</p> <p>e) the availability (in Pakistan) of spare parts and after-sales services for the equipment offered in the Bid;</p> <p>f) the projected operating and maintenance costs during the life of the equipment;</p> <p>g) the performance and productivity of the equipment offered; and/or</p> <p>h) other specific criteria indicated in the TBS and/or in the Technical Specifications</p>
	33.5	<p>33.5 For factors retained in BDS, pursuant to ITB 33.4 one or more of the following quantification methods will be applied, as detailed in the BDS:</p> <p>(a) Inland transportation from EXW/port of entry/border point, Insurance and incidentals. Inland transportation, insurance, and other incidental costs for delivery of the goods from EXW/port of entry/border point to Project Site named in the BDS will be computed for each Bid by the PA on the basis of published tariffs by the rail or road transport agencies, insurance companies, and/or other appropriate sources. To facilitate such computation, Bidder shall furnish in its Bid the estimated dimensions and shipping weight and the approximate EXW or as per applicable INCOTERM value of each package. The above cost will be added by the Procuring Agency to EXW or as per applicable INCOTERM price.</p> <p>(b) Delivery schedule.</p> <p>i) The Procuring Agency requires that the goods under the Invitation for Bids shall be delivered (shipped) at the time specified in the Schedule of Requirements. The estimated time of arrival of the goods at the Project Site will be calculated for each Bid after allowing for reasonable international and inland transportation time. Treating the Bid resulting in such time of arrival as the base, a delivery "adjustment" will be calculated for other Bids by applying a percentage, specified in the BDS, of the EXW or as per applicable INCOTERM price for each week of delay beyond the base, and this will be added to the Bid price for evaluation. No credit shall be given to early delivery. Or</p> <p>ii) The goods covered under this invitation are required to be delivered (shipped) within an acceptable range of weeks specified in the Schedule of Requirement. No credit will be given to earlier deliveries, and Bids offering delivery beyond this range will be treated as non-responsive. Within this acceptable range, an adjustment per week, as specified in the BDS, will be added for evaluation to the Bid price of Bids offering deliveries later than the earliest delivery period specified in the Schedule of Requirements. Or</p> <p>(iii) The goods covered under this invitation are required to be delivered (shipped) in partial shipments, as specified in the Schedule of Requirements. Bids offering deliveries earlier or later than the specified deliveries will be adjusted in the evaluation by adding to the Bid price a factor equal to a percentage, specified in</p>

the BDS, of EXW or as per applicable INCOTERM price per week of variation from the specified delivery schedule.

(c) Deviation in payment schedule.

i) Bidders shall state their Bid price for the payment schedule outlined in the SCC. Bids will be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in Bid price they wish to offer for such alternative payment schedule. The Procuring Agency may consider the alternative payment schedule offered by the selected Bidder.

Or

ii) The SCC stipulates the payment schedule offered by the Procuring Agency. If a Bid deviates from the schedule and if such deviation is considered acceptable to the Procuring Agency, the Bid will be evaluated by calculating interest earned for any earlier payments involved in the terms outlined in the Bid as compared with those stipulated in this invitation, at the rate per annum specified in the BDS.

(d) Cost of spare parts

i) The list of items and quantities of major assemblies, components, and selected spare parts, likely to be required during the initial period of operation specified in the BDS, is annexed to the Technical Specifications. The total cost of these items, at the unit prices quoted in each Bid, will be added to the Bid price.

Or

ii) The Procuring Agency will draw up a list of high-usage and high-value items of components and spare parts, along with estimated quantities of usage in the initial period of operation specified in the BDS. The total cost of these items and quantities will be computed from spare parts unit prices submitted by the Bidder and added to the Bid price.

Or

iii) The Procuring Agency will estimate the cost of spare parts usage in the initial period of operation specified in the BDS, based on information furnished by each Bidder, as well as on past experience of the Procuring Agency or other Procuring Agency's in similar situations. Such costs shall be added to the Bid price for evaluation.

(e) Spare parts and after sales service facilities in Pakistan
The cost to the Procuring Agency of establishing the minimum service facilities and parts inventories, as outlined in the BDS or elsewhere in the Bidding Documents, if quoted separately, shall be added to the Bid price.

(f) Operating and maintenance costs
Since the operating and maintenance costs of the goods under procurement form a major part of the life cycle cost of the equipment, these costs will be evaluated in accordance with the criteria specified in the BDS or in the Technical Specifications.

(g) Performance and productivity of the equipment.

(i) Bidders shall state the guaranteed performance or efficiency in response to the Technical Specification. For each drop in the performance or efficiency below the norm of 100, an adjustment for an amount specified in the BDS will be added to the Bid Price, representing the capitalized cost of additional operating costs over the life of the plant, using the methodology specified in the BDS or in the Technical Specifications.

		<p>Or</p> <p>(ii) Goods offered shall have a minimum productivity specified under the relevant provision in the Technical Specifications to be considered responsive. Evaluation shall be based on the cost per unit of the actual productivity of goods offered in the Bid, and adjustment will be added to the Bid price using the methodology specified in the BDS or in the Technical Specifications.</p> <p>(h) Specific additional criteria.</p>
	33.6	If these Bidding Documents allow Bidders to quote separate prices for different Lots, and the award to a single Bidder of multiple Lots, the methodology of evaluation to determine the lowest evaluated Lot combinations, including any discounts offered in the Form of Bid, is specified in the BDS.
34) Domestic preference	34.1	If the BDS so specifies, the Procuring Agency will grant a margin of preference to certain goods in line with the rules, regulations, regulatory guides or instructions issued by the Authority from time to time.
35) Determination of Most Advantageous Bid	35.1	In case where the Procuring Agency adopts the Cost Based Evaluation Technique and, the Bid with the lowest evaluated price from amongst those which are eligible, compliant and substantially responsive shall be the Most Advantageous Bid.
	35.2	<p>The Procuring Agency may adopt the Quality & Cost Based Selection Technique due to the following two reasons:</p> <p>i. Where the Procuring Agency knows about the main features, usage and output of the products; however not clear about the complete features, technical specifications and functionalities of the goods to be procured and requires the bidders to submit their proposals defining those features, specifications and functionalities; or</p> <p>ii. Where the Procuring Agency, in addition to the mandatory requirements and mandatory technical specifications, requires parameters specified in Evaluation Criteria to be evaluated while determining the quality of the goods:</p> <p>In such cases, the Procuring Agency may allocate certain weightage to these factors as a part of Evaluation Criteria, and may determine the ranking of the bidders on the basis of combined evaluation in accordance with provisions of Rule 2(1)(h) of PPR-2004.</p>
36) Post-qualification of Bidder and/or Abnormally Low Financial Proposal	36.1	<p>36.1 After determining the Most Advantageous Bid, if neither the pre-qualification was undertaken separately nor any qualification parameters were undertaken as part of determining the Most Advantageous Bid, the Procuring Agency shall carry out the post-qualification of the Bidder using only the requirements specified in the BDS.</p> <p>In case of International Tendering, the parameters for incorporation or licensing within Pakistan may be fulfilled as part of post qualification</p>
	36.2	<p>36.2 Where the Bid price is considered to be abnormally low, the Procuring Agency shall perform price analysis either during determination of Most Advantageous Bid or as a part of the post-qualification process. The following process shall apply:</p> <p>(a) The Procuring Agency may reject a Bid if the Procuring Agency has determined that the price in combination with other constituent elements of the Bid is abnormally low in relation to the</p>

		<p>subject matter of the procurement (i.e. scope of the procurement or ancillary services) and raises concerns as to the capability and capacity of the respective Bidder to perform that contract;</p> <p>(b) Before rejecting an abnormally low Bid the Procuring Agency shall request the Bidder an explanation of the Bid or of those parts which it considers contribute to the Bid being abnormally low; take account of the evidence provided in response to a request in writing; and subsequently verify the Bid or parts of the Bid being abnormally low;</p> <p>(c) The decision of the Procuring Agency to reject a Bid and reasons for the decision shall be recorded in the procurement proceedings and promptly communicated to the Bidder concerned;</p> <p>(d) The Procuring Agency shall not incur any liability solely by rejecting abnormally Bid; and</p> <p>(e) An abnormally low Bid means, in the light of the Procuring Agency's estimate and of all the Bids submitted, the Bid appears to be abnormally low by not providing a margin for normal levels of profit.</p> <p>Guidance for Procuring Agency: In order to identify the Abnormally Low Bid (ALB) following approaches can be considered to minimize the scope of subjectivity:</p> <p>(i) Comparing the bid price with the cost estimate;</p> <p>(ii) Comparing the bid price with the bids offered by other bidders submitting substantially responsive bids; and</p> <p>(iii) Comparing the bid price with prices paid in similar contracts in the recent past either government- or development partner-funded.</p>
	36.3	The Procuring Agency will determine to its satisfaction whether the Bidder that is selected as having submitted the most advantageous Bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB 13.3.
	36.4	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 Bidder, pursuant to ITB 13.3, as well as such other information as the Procuring Agency deems necessary and appropriate. Factors not included in these Bidding Documents shall not be used in the evaluation of the Bidders' qualifications.
	36.5	Procuring Agency may seek "Certificate for Independent Price Determination" from the Bidder and the results of reference checks may be used in determining award of contract. Explanation: The Certificate shall be furnished by the bidder. The bidder shall certify that the price is determined keeping in view of all the essential aspects such as raw material, its processing, value addition, optimization of resources due to economy of scale, transportation, insurance and margin of profit etc.
	36.6	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 ranked bidder to make a similar determination of that Bidder's capabilities to perform satisfactorily.

6. Award of Contract

37) Criteria of award	37.1	Subject to ITB 36 and 38, the Procuring Agency will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding Documents and who has been declared as Most Advantageous Bidder, provided that such Bidder has been determined to be: <ul style="list-style-type: none"> a. eligible in accordance with the provisions of ITB 3; b. is determined to be qualified to perform the Contract satisfactorily; and c. Successful negotiations have been concluded, if any.
38) Negotiations	38.1	Negotiations may be undertaken with the Most Advantageous Bid relating to the following areas: <ul style="list-style-type: none"> a. a minor alteration to the technical details of the statement of requirements; b. reduction of quantities for budgetary reasons, where the reduction is in excess of any provided for in the Biding documents; c. a minor amendment to the special conditions of Contract; d. finalizing payment arrangements; e. delivery arrangements; f. the methodology for provision of related services; or g. clarifying details that were not apparent or could not be finalized at the time of Bidding;
	38.2	Where negotiation fails to result into an agreement, the Procuring Agency may invite the next ranked Bidder for negotiations. Where negotiations are commenced with the next ranked Bidder, the Procuring Agency shall not reopen earlier negotiations.
39) Procuring Agency's Right to reject All Bids	39.1	Notwithstanding ITB 37, the Procuring Agency reserves the right to reject all the bids, and to annul the Bidding process at any time prior to award of contract, without thereby incurring any liability to the affected Bidder or Bidders. However, the Authority (i.e. PPRA) may call from the Procuring Agency the justification of those grounds.
	39.2	Notice of the rejection of all Bids shall be given promptly to all Bidders that have submitted Bids.
	39.3	The Procuring Agency shall upon request communicate to any Bidder the grounds for its rejection of its Bids, but is not required to justify those grounds.
40) Procuring Agency's Right to Vary Quantities at the Time of Award	40.1	The Procuring Agency reserves the right at the time of contract award to increase or decrease the quantity of goods or related services originally specified in these Bidding Documents (schedule of requirements) provided this does not exceed by the percentage indicated in the BDS, without any change in unit price or other terms and conditions of the Bid and Bidding Documents
41) Notification of award	41.1	Prior to the award of contract, the Procuring Agency shall issue a Final Evaluation Report giving justification for acceptance or rejection of the bids.
	14.2	Where no complaints have been lodged, the Bidder whose Bid has been accepted will be notified of the award by the Procuring Agency prior to expiration of the Bid Validity period in writing or electronic forms that provide record of the content of communication. The Letter of Acceptance will state the sum that the Procuring Agency will pay the successful Bidder in consideration for the execution of the scope of works as prescribed by the Contract (hereinafter and in

		the Contract called the "Contract Price).
	41.3	The notification of award will constitute the formation of the Contract, subject to the Bidder furnishing the Performance Security (or guarantee) in accordance with ITB 43 and signing of the contract in accordance with ITB 42.2.
	41.4	Upon the successful Bidder's furnishing of the performance security (or guarantee) pursuant to ITB 43, the Procuring Agency will promptly notify each unsuccessful Bidder, the name of the successful Bidder and the Contract amount and will discharge the Bid Security or Bid Securing Declaration of the Bidders pursuant to ITB 18.7.
42) Signing of the contract	42.1	Promptly after notification of award, Procuring Agency shall send the successful Bidder the draft agreement, incorporating all terms and conditions as agreed by the parties to the contract.
	42.2	Immediately after the Redressal of grievance by the GRC, and after fulfillment of all conditions precedent of the Contract Form, the successful Bidder and the Procuring Agency shall sign the contract.
	42.3	Where no formal signing of a contract is required, purchase order issued to the bidder shall be construed to be the contract.
43) Performance Security (or Guarantee)	43.1	After the receipt of the Letter of Acceptance, the successful Bidder, within the specified time, shall deliver to the Procuring Agency a Performance Security (or Guarantee) in the amount and in the form stipulated in the BDS and SCC, denominated in the type and proportions of currencies in the Letter of Acceptance and in accordance with the Conditions of Contract.
	43.2	If the Performance Security (or Guarantee) is provided by the successful Bidder and it shall be in the form specified in the BDS which shall be in any of the following: (a) certified cheque, cashier's or manager's cheque, or bank draft; (b) irrevocable letter of credit issued by a Scheduled bank or in the case of an irrevocable letter of credit issued by a foreign bank, the letter shall be confirmed or authenticated by a Scheduled bank; (c) bank guarantee confirmed by a reputable local bank or, in the case of a successful foreign Bidder, bonded by a foreign bank; or (d) surety bond callable upon demand issued by any reputable surety or insurance company. Any Performance Security (or guarantee) submitted shall be enforceable in Pakistan.
	43.3	Failure of the successful Bidder to comply with the requirement of ITB 43.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security, in which event the Procuring Agency may make the award to the next ranked Bidder or call for new Bids.
44) Advance payment	44.1	The advance payment will not be provided in normal circumstances. However, in case where international inco terms are involved, the same will be dealt with standard international practices and in the manner as prescribed in ITB 44.2.
	44.2	The Procuring Agency will provide an Advance Payment as stipulated in the Conditions of Contract, subject to a maximum amount, as stated in the BDS. The Advance Payment request shall be accompanied by an Advance Payment Security (Guarantee) in the form provided in Section IX. For the purpose of receiving the Advance Payment, the Bidder shall make and estimate of, and include in its Bid, the expenses that will be incurred in order to

		commence Delivery of Goods. These expenses will relate to the purchase of equipment, machinery, materials, and on the engagement of labor during the first month beginning with the date of the Procuring Agency's "Notice to Commence" as specified in the SCC.
45) Arbitration	45.1	The Arbitrator shall be appointed by mutual consent of the both parties as per the provisions specified in the SCC.
46) Corrupt & Fraudulent Practices	46.1	Procuring Agencies (including beneficiaries of Government funded projects and procurement) as well as Bidders/Suppliers/Contractors under Government financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts, and will avoid to engage in any corrupt and fraudulent practices.

7. Grievance Redressal & Complaint Review Mechanism

47) Constitution of Grievance Redressal	47.1	Procuring agency shall constitute a Grievance Redressal Committee (GRC) comprising of odd number of person with proper power and authorization to address the complaint. The GRC shall not have any of the members of Procurement Evaluation Committee. The committee must have one subject specialist depending the nature of the procurement.
48) GRC Procedure	48.1	Any party can file its written complaint against the eligibility parameters or any other terms and conditions prescribed in the prequalification or bidding documents found contrary to provision of Procurement Regulatory Framework, and the same shall be addressed by the GRC well before the bid submission deadline
	48.2	Any Bidder feeling aggrieved by any act of the procuring agency after the submission of his bid may lodge a written complaint concerning his grievances not later than seven days of the announcement of technical evaluation report and five days after issuance of final evaluation report.
	48.3	In case, the complaint is filed against the technical evaluation report, the GRC shall suspend the procurement proceedings.
	48.4	In case, the complaint is filed after the issuance of the final evaluation report, the complainant cannot raise any objection on technical evaluation of the report: Provided that the complainant may raise the objection on any part of the final evaluation report in case where single stage one envelop bidding procedure is adopted.
	48.5	The GRC, in both the cases shall investigate and decide upon the complaint within ten days of its receipt.
	48.6	Any bidder or the procuring agency not satisfied with the decision of the GRC may file Appeal before the Appellate Committee of the Authority on prescribed format after depositing the Prescribed fee.
	48.7	The Committee, upon receipt of the Appeal against the decision of the GRC complete in all respect shall serve notices in writing upon all the parties to Appeal.
	48.8	The committee shall call the record from the concerned procuring agency or the GRC as the case may be, and the same shall be provided within prescribed time
	48.9	The committee may after examination of the relevant record and hearing all the concerned parties, shall decide the complaint within fifteen (15) days of receipt of the Appeal
	48.10	The decision of the Committee shall be in writing and shall be signed by the Head and each Member of the Committee. The decision of the committee shall be final.

8. Mechanism of Blacklisting

49) Mechanism of blacklisting	49.1	The Procuring Agency shall bar for not more than the time prescribed in Rule-19 of the Public Procurement Rules, 2004, from participating in their respective procurement proceedings, bidder or contractor who either: i. Involved in corrupt and fraudulent practices as defined in Rule-2 of Public Procurement Rules; ii. Fails to perform his contractual obligations; and iii. Fails to abide by the id securing declaration;
	49.2	The show cause notice shall contain: (a) precise allegation, against the bidder or contractor; (b) the maximum period for which the Procuring Agency proposes to debar the bidder or contractor from participating in any public procurement of the Procuring Agency; and (c) the statement, if needed, about the intention of the Procuring Agency to make a request to the Authority for debarring the bidder or contractor from participating in public procurements of all the procuring agencies
	49.3	The procuring agency shall give minimum of seven days to the bidder or contractor for submission of written reply of the show cause notice
	49.4	In case, the bidder or contractor fails to submit written reply within the requisite time, the Procuring Agency may issue notice for personal hearing to the bidder or contractor/ authorize representative of the bidder or contractor and the procuring agency shall decide the matter on the basis of available record and personal hearing, if availed.
	49.5	In case the bidder or contractor submits written reply of the show cause notice, the Procuring Agency may decide to file the matter or direct issuance of a notice to the bidder or contractor for personal hearing
	49.6	The Procuring Agency shall give minimum of seven days to the bidder or contractor for appearance before the specified officer of the Procuring Agency for personal hearing. The specified officer shall decide the matter on the basis of the available record and personal hearing of the bidder or contractor, if availed
	49.7	The procuring Agency shall decide the matter within fifteen days from the date of personal hearing unless the personal hearing is adjourned to a next date and in such an eventuality, the period of personal hearing shall be reckoned from the last date of personal hearing.
	49.8	The Procuring Agency shall communicate to the bidder or contractor the order of debarring the bidder or contractor from participating in any public procurement with a statement that the bidder or contractor may, within thirty days, prefer a representation against the order before the Authority
	49.9	49.9 Such blacklisting or barring action shall be communicated by the procuring agency to the Authority and respective bidder or bidders in the form of decision containing the grounds for such action. The same shall be publicized by the Authority after examining the record whether the procedure defined in blacklisting and debarment mechanism has been adhered to by the procuring agency.
	49.10	The bidder may file the review petition before the Review Petition Committee Authority within thirty days of communication of such blacklisting or barring action after depositing the prescribed fee and in accordance with "Procedure of filing and disposal of review

		petition under Rule-19(3) Regulations, 2021". The Committee shall evaluate the case and decide within ninety days of filing of review petition
	49.11	The committee shall serve a notice in writing upon all respondent of the review petition. The notices shall be accompanied by the copies of review petition and all attached documents of the review petition including the decision of the procuring agency. The parties may file written statements along with essential documents in support of their contentions. The Committee may pass such order on the representation may deem fit.
	49.12	The Authority on the basis of decision made by the committee either may debar a bidder or contractor from participating in any public procurement process of all or some of the procuring agencies for such period as the deemed appropriate or acquit the bidder from the allegations. The decision of the Authority shall be final.

9. Bid Data Sheet

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

BDS Clause Number	ITB Number	Amendments of, and Supplements to, Clauses in the Instruction to Bidders
A. Introduction		
1.	1.1	Name of Procuring Agency: Quaid-i-Azam University The subject of procurement is: A Solar Photovoltaic (PV) On-Grid System with a rated capacity of 135 KWp at Standard Test Conditions (STC) and a 30kWp Hybrid Solar system with battery backup are planned for installation on the rooftop of Doctor Razi-ud-din Siddiqui Memorial Library (DRSM) QAU Period for delivery of goods: [3 month] Commencement date for delivery of Goods: [the commencement date after issuance of supply order]
2	2.1 & 2.2	Financial year for the operations of the Procuring Agency: 2023-24 Name of Project: A Solar Photovoltaic (PV) On-Grid System with a rated capacity of 135 KWp at Standard Test Conditions (STC) and a 30kWp Hybrid Solar system with battery backup are planned for installation on the rooftop of Doctor Razi-ud-din Siddiqui Memorial Library (DRSM) QAU Name of financing institution: Government of Pakistan
4.	3.1	Maximum number of members in the joint venture, consortium or association shall be: Not applicable
5.	4.1	Ineligible country(s) is or are: As per policy of the Government of Pakistan
6.	4.6	Demonstration of authorization by manufacturer: [As per the requirement of technical specifications of the project]

B. Bidding Documents

7.	7.2	The number of documents to be completed and returned is one original in the office of Purchase & Store Section of Quaid-i-Azam University and also uploaded on the EPADS.
8.	8.1	The address for clarification of Bidding Documents is [Room No 33, Purchase & Store Section of Quaid-i-Azam University, Islamabad & also on EPADS]
	8.5	Pre-bid meeting will be not be applicable
9.	10.1	The Language of all correspondences and documents related to the Bid is: [English]
10.	11.1(b)	Detail of sample(s) to be submitted with the Bid are: <i>[After award of the contract the bidders shall submit the samples of the goods as specified in the bill of material and get approved by the nominated persons before installation at site)</i>
11.	11.2 (b)	Characteristics <i>[as mentioned in the bill of materials]</i>
12.	11.1 (h)	In addition to the documents stated in ITB 11 , the following documents must be included with the Bid [as mentioned in the technical specification of the bidding documents as mandatory requirements]
13.	12.3 (c)	Other procurement specific documentation requirements are: [as mentioned in the technical specification of the bidding documents as qualifying criteria] .
14.	12.4	Spare parts required for [as mentioned in the technical specification of the bidding documents] years of operation.
15.	13.3 (b)	The qualification criteria required from Bidders in ITB 13.3(b) is modified as follows: [as mentioned in the technical specification of the bidding documents as qualifying criteria] . The Bidder is required to include with its Bid, documentation from the manufacturer of the goods, that it has been duly
16.	(a) (iii), (iv) (optional)	For goods manufactured from within Pakistan the price quoted shall be <i>[Including all taxes as applicable and FOR basis.]</i>

C. Preparation of Bids

17.	15.7	For goods offered from abroad the price quoted shall be: [Not applicable]
	15.8	The price shall be fixed.
18.	16.1 (a)	a) For goods and related services originating in Pakistan the currency of the Bid shall be <i>Pakistani Rupees</i> ;

19.	16.2	For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency specified in the bidding documents. The rate of exchange shall be the selling rate, prevailing on the date of opening of bids specified in the bidding documents, as notified by the State Bank of Pakistan on that day. Not applicable only PKR quoted price is applicable
20.	17.1	The Bid Validity period shall be [180 maximum] days.
21.	18.1	The amount of Bid Security shall be 2% earnest money (Rs.500,000) of the total estimated cost/value which is amounting to Rs.25.00Million for the project.
22.	18.3	The Bid Security shall be in the form of CDR/Bank Draft/ in the name of Treasurer of Quaid-i-Azam University. The bidder shall submit the scanned copy of bid security on EPADS and original will be submitted with financial bid.
23.	18.3 (c)	Other forms of security are: [Not applicable]
24.	19.1	Alternative Bids to the requirements of the Bidding Documents [not applicable]
235	21.1	The number of copies of the Bid to be completed and returned shall be [1] .
26.	21.2	Written confirmation of authorization are: [nominated person for authorization]

D. Submission of Bids

27.	22.2 (a)	Bid shall be submitted [Room 33, Purchase section, Admin Block Quaid-i-Azam University, Islamabad]
28.	22.2 (b)	Title of the subject Procurement or Project name: [as stated above] Time and date for submission: [23.04.2024 time 11.00 AM and will be opened on same date at 11.30 AM]

E. Opening and Evaluation of Bids

30.	26.1	The Bid opening shall take place at: Street address: [Committee Room Admin Block Quaid-i-Azam University, Islamabad]
33.	33.4 (h)	Other specific criteria are [as mentioned in the technical specifications]

F. Award of Contract

44.	40.1	Percentage for quantity increase or decrease is [as approved by the Competent Authority as per requirement] .
45.	43.1	The bid security/earnest money shall be used as a performance security/guarantee defected liability period will be one year and performance guarantee will be released after defected liability period.

46	46.1	<ul style="list-style-type: none"> i. Mobilization of advance (10 % of contract price) against bank guarantee or insurance guarantee from AA rating insurance company. ii. 30% payment shall be made after the delivery of PV modules and PV inverters subject to the Physical Verification Committee. iii. 60% payment shall be made after completion of all jobs.
	46.2	The contract shall be awarded on lumpsum basis after fulfillment of the mandatory requirement and qualifying criteria
47	47.1	Arbitrator shall be appointed by mutual consent of the both parties.

G. Review of Procurement Decisions

48	48.1	The decisions of the procurement committee of <i>Quaid-i-Azam University, Islamabad</i> shall be reviewed by the GRC as notified
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10: Schedule of Requirements, Technical Specifications

Technical Specifications

1 OVERVIEW

In recent years, the global focus on sustainable energy solutions has prompted countries worldwide to explore renewable energy sources as alternatives to conventional fossil fuels. Pakistan, facing its own energy challenges, has recognized the importance of transitioning towards cleaner and more reliable energy sources. One sector that could significantly benefit from this transition is the higher education system. The integration of solar power systems within universities in Pakistan is not only a necessity to address the country's energy crisis but also presents a unique opportunity to foster innovation, research, and environmental consciousness.

Pakistan's energy landscape has been marred by frequent power outages, escalating energy costs, and environmental concerns stemming from fossil fuel-based energy generation. As the demand for energy continues to grow with economic development and population growth, the need for sustainable solutions becomes more pressing. Solar power, being abundant and environmentally friendly, presents a compelling solution to mitigate the energy crisis while reducing the carbon footprint.

Quaid-i-Azam University (QAU) holds the status of a federally chartered public university. Given the recent surge in electricity prices across the nation, there arises an urgent requirement for an electricity generation system capable of harnessing solar energy to provide cost-free power. This solar solution holds the potential to alleviate the financial burden of electricity bills for QAU.

The desired solution should be Simple, Manageable and Resilient. The entire solution is on turnkey basis with at-least one year maintenance / warranty.

2 SOLUTION REQUIREMENTS

A Solar Photovoltaic (PV) On-Grid System with a rated capacity of 135 KWp at Standard Test Conditions (STC) and a 30kWp Hybrid Solar system with battery backup are planned for installation on

the rooftop of Doctor Razi-ud-din Siddiqui Memorial Library (DRSM) QAU. The rooftop area is free from shade and covers an area of 25,921 SQFt. The design of the Solar PV system needs to achieve a performance ratio of not less than 80%. The target for the system's daily average energy generation is 3.8 kilowatt-hours per kilowatt peak (KWh/KWp/Day), calculated by dividing the annual AC energy by 365.

The inverter's size should either match the size of PV panels or be up to 15% smaller than the PV module size. A comprehensive Single Line Diagram (SLD) is required, detailing the entire path from the PV Modules to the point of injection. The system must also comply with the net metering regulations outlined in the Standard Operating Procedures (SOPs) of the local Distribution Company (DISCO) and NEPRA SRO 892(1)/2015.

In terms of safety and functionality, the system must incorporate protection devices including proper earthing, anti-islanding measures, AC/DC disconnects, a manual switch, lightning arrestors, and surge protection. To ensure stability, the solar PV mounting structure should be securely anchored to concrete pads on the rooftop. Each pad should be designed to withstand the wind speed of 150 km/h. It is important to note that direct roof drilling is not allowed, and the responsibility for civil work rests with the installing company.

The AC Power distribution Cabinet should house components such as DC/AC disconnects / breakers, Bus Bars, manual ON/OFF switches, and voltage and current metering devices. Moreover, the system must be capable of remote monitoring of energy-related parameters through a dedicated application on laptops, mobile devices, and personal computers. The system must be fully equipped with all the necessary components and accessories, complete in all respects to ensure its effective operation.

3 SOLAR SYSTEM COMPONENTS

3.1 SOLAR PV MODULES

- Cell Configuration and Type: Utilizing Mono PERC Half Cut Technology
- The solar photovoltaic (PV) modules must adhere to Tier-1 standards as per the Bloomberg List of 2022.
- Each individual PV module should have a minimum power output of 500W, employing the MONO PERC Half Cut Technology.
- The modules are required to demonstrate an efficiency level of no less than 21%.
- Achieved Fill Factor should be equal to or greater than 0.76%.
- The modules must hold TUV Rhineland certification in accordance with the latest editions of IEC standards 61215 and 61730.
- The supplier should provide a warranty covering module replacement for a minimum of 12 years and performance warranty of 25 years.
- The cumulative PV module capacity should not fall below 165 KWp at Standard Test Conditions (STC).

- Documentation including Flash Test and Module Test reports in accordance with IEC standards 61215 and 61730 must be provided at the time of supply.
- The modules should come equipped with connected cables and MC4 connectors.
- Preferred manufacturers include LONGI, Jinko, Canadian Solar.
- Annual degradation rate must not exceed 0.50% on a yearly basis.

3.2 ON-GRID SOLAR INVERTORS

- Inverter Type: Three-phase Grid Tied String Inverters
- Warranty Period: 5 years from the date of commissioning.
- Origin: USA/EUROPE/CHINA (Preferred brands: Huawei/Eqv.)
- Inverter sizing should either match the size of PV Modules i.e. 135kW or be up to 15% smaller than the PV module size.
- Minimum Required Efficiency: 98%
- Total Harmonic Distortion: Below 3%
- Adherence to Standards: UL 1741, IEC 62109-1/2, IEC 62116, IEC 61683, and IEC 61727
- Ingress Protection Level: At least IP 65
- Incorporated Surge Protective Devices (SPDs) on both DC and AC sides, along with fuses for safeguarding.
- Compulsory inclusion of communication interfaces, protective features, and remote monitoring capabilities.
- Inverters shall have compatibility to install anti-reverse flow smart meter, if and when required.

3.3 HYBRID SOLAR INVERTORS

- Inverter Type: Hybrid Inverters
- Warranty Period: 5 years from the date of commissioning
- Origin: USA/EUROPE/CHINA (Preferred brands: Inverex/Eqv.)
- Inverter sizing should either match the size of PV Modules i.e. 30kW or be up to 15% smaller than the PV module size.
- Minimum Required Efficiency: 98%
- Total Harmonic Distortion: Below 3%
- Adherence to Standards: UL 1741, IEC 62109-1/2, IEC 62116, IEC 61683, and IEC 61727
- Ingress Protection Level: At least IP 66
- Incorporated Surge Protective Devices (SPDs) on both DC and AC sides, along with fuses for safeguarding / protection.
- Compulsory inclusion of communication interfaces, protective features, and remote monitoring capabilities.
- Inverters shall have compatibility to install anti-reverse flow smart meter, if and when required.

3.4 BATTERY BANK

- Battery bank shall incorporate lithium deep cycle batteries.
- Warranty Period: 5 years from the date of commissioning
- Origin: USA/EUROPE/CHINA (Preferred brands: Pylontech/Eqv.)
- Battery bank shall be designed for continuous backup 2 hours at the peak load of 20kW.
- Batteries shall be installed in battery storage system (BSS) or battery rack to ensure safety of batteries.
- Batteries shall have 90% depth of discharge.
- Working Temp of batteries shall be from 0° C to 50° C

3.5 PV PANELS MOUNTING STRUCTURE

- The framework shall be composed of Hot Dipped Galvanized Iron / Aluminium (as suitable for the site requirements), accompanied by SS 304 Nuts and Bolts (Galvanized), to be affixed onto concrete pads or a base structure to withstand the wind speed of 150 Km/h. Thickness of structure frame should not be less than 2.6 mm (12 Gauge).
- The structure must capable to endure wind loads of up to 150 KM per hour.
- Nuts, Bolts, Washers, and other supporting elements shall be stainless steel, possessing suitable gauges in accordance with the design and corrosion-resistant properties (Galvanized).
- A detailed diagram of the structure (AutoCAD drawing and PDF format of drawing) showcasing side, front, and top views, complete with dimensions, must be furnished.
- The mounting structure's tilt angle must not fall below 20 degrees and not more than 45 degrees.
- Arrangement of panels shall be made in accordance that there shall be a gap of not less than 1 inch between solar panels to reduce the pressure of wind on solar plates.

3.6 PV PANELS CONNECTIVITY

- PV Panels must be properly connected using MC4 Connectors
- It shall be the responsibility of installer to make sure that connectors / connections are not loose in any case.
- Quantity: According to the design specifications
- Current Rating: According to the design specifications
- Ingress Protection Level: IP67
- Conformance to Standards: EN 50521:2008

3.7 PV CABLES

- Single-core copper cable with a conductor capable of withstanding temperatures up to a maximum of 120 degrees Celsius, conductor shall have 99.9% copper purity.
- Cables are required to have double insulation and must be tested at 1 KV.
- Cables shall be designed to be weather-resistant, UV-resistant, resistant to ozone corrosion, halogen-free, and flame-resistant.
- Utilize XLPE or XLPO insulated cable specially made for solar system that can endure a temperature up to 120 degrees Celsius.
- Test reports, encompassing Conductor Resistance, Insulation Resistance, Pressure, and Spark tests, are essential components to be provided before installation.
- Cabling must undergo testing in accordance with Solar PV standards, and the corresponding test report must be furnished.

3.8 CABLE TRUNKING SYSTEM

- Cables shall be laid in Hot Dipped Galvanised (HDG) perforated cable trays (thickness not less than 1.6 mm (16 gauge) of suitable size, complete with joint plates and nut bolts, from arrays to arrays and arrays to the protection panel.
- Cable trays shall be covered with HDG cover of same size. Thickness of cover shall not be less than 1.2 mm (18 gauge).
- Support for mounting of cable tray on the roof / wall shall be 5mm wide MS strip of suitable size (galvanised) as per cable tray, complete with M8 Rawl Bolts, nut, bolts and washers of suitable size. The support shall have the height of min. 4" from the ground / floor / wall.

3.9 SYSTEM PROTECTION

- The system must cover comprehensive protection measures, including both DC and AC disconnects, DC/AC surge protection, lightning arresters, grounding, and other necessary protections.
- Separate surge protection is mandatory for both the DC and AC sides of the PV system.
- Deployment of lightning arresters is essential, quantity of LA must conform site-specific conditions to avert potential damage from lightning.
- There shall be separate earthing for LPS system. Earth resistance at any point of LPS system should not exceed 5 ohms.
- For the purpose of grounding the solar PV system (including structure, inverter, SPDs, etc.), a minimum of two dedicated copper earth electrodes (for DC and AC) shall be provided. These electrodes will be connected via a 99.9 % pure copper wire of suitable size. The earth resistance for the DC and AC side grounding systems shall not exceed 3 ohms.

- All metallic chassis of DC and AC components requiring grounding must be individually and appropriately grounded in accordance with the local DISCO's net metering Standard Operating Procedures (SOP).
- There shall be proper manhole for all earthing pits (for LPS/earthing system) for the purpose of watering the pit on regular intervals.
- Earth pits shall be constructed in level with ground surface to ensure rainwater naturally enters the pit for the purpose of watering the earth pits.
- Earthing pits shall be provided with perforated manhole covers to ensure rainwater can enter in the earth pits.
- A drawing of earthing design is mandatory to be provided along with Technical Bid.

3.10 CIVIL WORK

- Installer shall carry all necessary civil work for construction of concrete pads or a base structure that shall withstand the wind load of 150 km/h on the mounting panels.
- Pads shall be constructed in a way that it shall not damage top layer of roof top.

3.11 NET METERING

- The solar system needs to adhere to the regulations outlined in SRO 892(1) 2015 and the DISCO SOP for net metering. The company is responsible for following the DISCO SOPs and NEPRA SRO to initiate the process of obtaining a net metering license after the entire installation is complete. All costs associated with net metering shall be included as an essential component of the bid.
- The company must possess a valid net metering permission license from AEDB/PPIB. Additionally, a smart meter must be installed and operational alongside the system to prevent any surplus energy from being exported to the grid until the net metering functionality becomes active.

3.12 REMOTE MONITORING

- The system should possess the ability for remote monitoring, including communication interfaces, data logging, and software integration. The company is required to set up and configure the entire system to enable parameter monitoring on laptops, mobile devices, and PCs. These parameters should include Load watts, PV watts, DC energy, and AC Injected energy, among others.

3.13 AC PROTECTION AND POWER DISTRIBUTION PANEL

- The AC Power Distribution cabinet shall incorporate AC circuit breakers, contactors, bus bars, AC SPD, and an On/Off main switch, equipped with voltage and current monitoring capabilities. These components should be of genuine, superior quality as approved by latest schedule of Pak PWD and in alignment with the national standards for switchgears.
- Single Line Drawing (SLD) of panel showing all components is mandatory to be provided along with technical bid.

3.14 SYSTEM MONITORING VIA INTERNET

- A 40" LED TV shall be install in the DRSM library for monitoring / display of production of solar system, load side parameters including actual generating power (kW), amount of generating energy today (kWh/day), ambience temperature (°C).
- It shall include all accessories including wifi router, CAT6 network cable, RJ45 connectors, ducting and all allied accessories.

3.15 TECHNICAL DATASHEETS AND MANUAL

- Technical Datasheets of all components including PV Panels, Invertors, Batteries and Power Analysers shall be provided with proposal.
- Successful bidder shall provide all operational and maintenance manuals of all components of system after successful completion of the job.

4 WARRANTY, SUPPORT, SLA, MAINTENANCE

- For all equipment: - All active, passive and supporting components (everything) must be covered for the period of min. one year for maintenance, warranty, software upgrade, hardware replacement, configuring, optimizing.

5 MANDATORY REQUIREMENTS FOR BIDDERS

- i. Bidder must be a registered with AEDB/PPIB.
- ii. Bidder shall have PEC license of C-5 or above.
- iii. Bidder must not be bankrupt (An affidavit on stamp paper shall be submitted).
- iv. Bidder must be valid sales tax and income tax registered and should have active tax payer.
- v. Bidder should have a local presence in Pakistan market for more than 4 years.
- vi. Should have proof / installed Solar System of at least 2 sites of 150kW each.
- vii. The successful bidder shall submit a declaration to supply all the required item as per delivery schedule or with a mutual understanding. (An affidavit on stamp paper shall be submitted)
- viii. The warranty period of the goods shall be as per standard warranty time offered by the manufacturer. The warranty period shall be counted from the date of commissioning. (An affidavit on stamp paper shall be submitted)

Note: It is mandatory for all bidders to fulfill all mandatory requirements as mentioned on Serial#5 of RFP to qualify for further process.

6 QUALIFYING CRITERIA

Sr #	Items	Points
1	Technical Proposal (Details/Datasheets of all items including PV Panels, Inverters, Battery bank being offered in compliance with Serial#7 of RFP) x20 Marks	20
2	Organizational Structure and Personnel Qualification (along with CVs of personnel) Organogram of company x5 Marks Electrical Engineer x7 Marks Supervisor x5 Marks Fabricator x3 Marks	20
3	Financial Capabilities Bank Statement (Past 6 months) x5 Marks Audit report of financial year 2020 - 2021 x2 marks Audit report of financial year 2021 - 2022 x2 marks Audit report of financial year 2022 - 2023 x2 marks Account maintenance certificate from Bank x5 Marks Bank Credit limit 5 Million or above x4 Marks	20
4	Past experience Completed Projects (20 Marks) Work order & Completion certificate of project having capacity 150kW or above x4 Marks each Ongoing Projects (20 Marks) Work order of project having capacity 150kW or above x4 Marks each	40
5	Total Points	100

Note: Only bidders with at least 60 marks out of 100 in Qualifying Criteria shall be qualified for opening of their financial bids.

7. Bill of Material

Sr #	Items / Description	Qty	Unit	Rate	Amount
PV Modules					
1	Providing and installation of Tier-1 550W Mono PERC Half Cut PV Panels Brand: Longi/Jinko/CanadianSolar/Trina/ Equivalent Origin: Imported Warranty: 25 Years	300	Nos.		
PV Inverters					
2	Providing and installation of 3 Phase On-Grid Invertor Rated Power: 115kW Max. Input Voltage (DC): 1100V Operating Voltage Range (DC): 200-1000V Output Line Voltage (AC): 400V Output Phase Voltage (AC): 230V Rated Output Current (A): 166A @400V Frequency: 50Hz Power Factor: ≥0.8	1	Nos.		

	European efficiency: $\geq 98\%$ Brand: Huawei/Sungrow/Growatt/Equivalent Origin: Imported Warranty: 5 Years				
3	Providing and installation of 3 Phase Hybrid Inverter Rated Power: 12kW Max. DC input power: 15.6 kW Rated PV input voltage: 550V Rated AC output and UPS power: 12kW Max. AC output power: 13.2kW AC output rated current: 17.4A @400V Max AC current: 26.1A @400V Frequency: 50Hz Power Factor: ≥ 0.8 European efficiency: $\geq 97\%$ Transfer time: 4ms Battery compatibility: Lithium batteries Brand: Huawei/Sungrow/Growatt/Inverex/ Equivalent Origin: Imported Warranty: 5 Years	2	Nos.		
Connectivity and Data logging					
4	Providing and installation of WIFI connectivity including all allied accessories and connection wires. (Complete job)	1	Job		
Switchgear/Protection Panel					
AC protection panel					
5	Providing and installation of AC Panel indoor type wall mount water proof distribution box fabricated from 16-SWG sheet steel with electrostatic paint of approved color, with key lock arrangement. Complete with internal wiring, earthing, neutral link, termination blocks and cable glands at the bottom of the DB. AC Protection panel must include 4P breakers of suitable rating, SPD 4P (40kA Min) Type1 & Type2, Power Analyser, Voltmeter, Current transformer CT(250/5A) and indication lights, complete in all respects. AC Breakers: Schneider/ Equivalent SPD: Citel/ Equivalent Power Analyzer:	1	Job		

	Klmsen/ Equivalent				
DC Combiner box					
6	<p>Providing and installation of Indoor type wall mount water proof string combiner box fabricated from 16-SWG sheet steel with electrostatic paint of approved color, with key lock arrangement. Complete with internal wiring (if required), termination blocks and cable glands at the bottom of the DB. It shall provide with DC breakers/isolators and SPDs of suitable rating for DC protection of each string, complete in all respects.</p> <p>DC Breakers/Isolators: Schneider/Abb/ Equivalent.</p> <p>SPDs: Citel/ Equivalent</p>	1	Job		
AC/DC Protection for Hybrid System					
7	<p>AC/DC Protection for Hybrid System</p> <p>Providing and installation of protection panel indoor type wall mount fabricated from 16-SWG sheet steel with electrostatic paint of approved color, with lock and key arrangement. Complete with internal wiring, termination block, cable glands at the bottom of DB. Panel shall be equipped with AC & DC protection of suitable rating and a changeover for 30kW hybrid system, complete in all respects.</p>	1	Job		
AC/DC Cables					
8	<p>Providing and installation of AC/DC cables/wires as per design as per mentioned specifications, complete in all respects.</p> <p>DC Wire Single core 4mm² flexible copper 1000V Red XLPE or XLPO insulation</p> <p>DC Wire single core 4mm² flexible copper 1000V Black XLPE or XLPO insulation</p> <p>AC cables 4 core copper stranded PVC/PVC insulated cables of suitable ratings</p> <p>Earth wire green/yellow copper stranded PVC insulated</p> <p>Including proper termination accessories, lugs, shrouds, sleeves complete in all respects.</p> <p>Brand: Newage/Fast Cables/ Equivalent</p>	1	Job		
Battery Bank					
9	<p>Supply and installation of battery bank consisting of deep cycle Lithium batteries including mounting rack / battery storage system, connection cables of suitable</p>	1	Job		

	ratings, lugs, shrouds for proper termination, complete in all respects. Note: Battery bank shall design for the backup of 2 hours on peak load of 20kW. Brand: Pylontech/ Equivalent				
PV Panels Mounting Structure					
10	Providing and installation of Hot dipped Galvanized Iron (coating shall be 82-85 microns) /Aluminium ground mounting structure, galvanized nut bolts, rawl bolts, washers along with civil works as per specifications / requirements, complete in all respects.	1	Job		
Cable Trunking System					
11	Providing and installation of perforated cable trays of suitable size with covers, joint plates, nut/bolts, PVC pipes, PVC flexible pipes, MC4 connectors, insulation tapes, PVC Channel, bends, cover screws, washers, and cable ties for 165kW system complete in all respects.	1	Job		
Earthing System & LPS					
12	Supply and installation of earthing for AC control panel and equipment earthing as per AEDB/NEPRA standards including copper rope, clamps, lugs, manhole with cover (min. 1'x1'), masonry works, 1" GI perforated pipe for watering with cap, earth bus bar (Copper) with insulator, lugs, shrouds complete in all respects. Note: Value of earthing shall be less than 3 Ohms.	2	Nos.		
	Supply and installation of lighting arrestors balls with spikes, copper rope, lugs, clamps, and earthing for Lighting Protection System (LPS) to PV Panels protection from lightning as per AEDB/NEPRA standards, including manhole for earthing pit with cover (min. 1'x1') masonry works, 1" GI perforated pipe for watering with cap, complete in all respects. Note: Value of earthing shall be less than 5 ohms.	1	Nos.		
Net Metering					
13	Providing and installation of 3 Phase Bi-Directional Net Meter as per WAPDA Standards, complete in all respects.	1	Job		
System Monitoring					
14	Supply and fixing of 40" LED TV for monitoring of solar system parameters of load end, including production of solar system (kW), energy units produced in a day (kWh/day), including network	1	Job		

	devices/accessories, ducting material, complete in all respects. LED TV: TCL/Eqv. Power Analyzer: Klemsen/ Equivalent				
Main Disconnect					
15	Providing and installation of external main disconnect switch as per design in a weather proof housing/box, complete in all respects. Rating: 400A	1	Job		
Air Conditioning					
15	Supply and Installation of 1 Ton inverter AC (Cool Only) including copper pipes, control and power wiring, power sockets and PVC ducting, complete in all respects. Brand: Dawlance/ Equivalent	2	Job		
Wiring Cables & Duct					
16	Supply of 4mm ² single core PVC insulated copper wire Brand: Newage/Fast Cables/ Equivalent.	5	Coils		
17	Supply of 2.5mm ² single core PVC insulated copper wire Brand: Newage/Fast Cables/ Equivalent	8	Coils		
18	Supply of 1.5mm ² single core PVC insulated copper wire Brand: Newage/Fast Cables/ Equivalent.	5	Coils		
19	Supply of PVC Duct 16x25 (mm) Brand: Popular/ Equivalent	2500	Rft		
Total Amount:					
GST and applicable all taxes:					
G. Total:					

Note:

- The bidders may visit the campus/site before designing the solution and consult with the end users.
- The bidders must consider the entire solution on the turn key basis and can only add additional components as per approved design.
- Site survey is mandatory for bidders.

CONDITIONS OF CONTRACT

1. GENERAL PROVISIONS

1.1 Definitions

In the Contract as defined below, the words and expressions defined shall have the following meanings assigned to them, except where the context requires otherwise:

The Contract

- 1.1.1 "Contract" means the Contract Agreement and the other documents listed therein.
- 1.1.2 "Specifications" means the minimum specifications of the equipment being parts of the net-metering based solar PV System as set out in the Bidding Documents and any Variation to such document.
- 1.1.3(A) "Employer Design" means the design of the net-metering based solar PV System as set out in the Bidding Documents and any Variation to such design.
- 1.1.3(B) "Contractor Design" means the design of the net-metering based solar PV System, prepared and submitted by the Contractor to the Employer under this Contract, based on the specifications of the offered equipment which design shall be in conformity with the Employer Design.
- 1.1.4 "Employer" means the person named in the Contract Data and the legal successors in title to this person, but not (except with the consent of the Contractor) any assignee.
- 1.1.5 "Contractor" means the person named in the Contract Data whose Bid has been accepted by the Employer and the legal successors in title to such person, but not (except with the consent of the Employer) any assignee of such person."
- 1.1.6 "Party" means either the Employer or the Contractor.

Dates, Times and Periods

- 1.1.7 "Commencement Date" means the date as mentioned in the Contract Data.
- 1.1.8 "Day" means a calendar day.
- 1.1.9 "Time for Completion" means the time for completion of the Works as stated in the Contract Data (or as extended under Sub-Clause 7.3), calculated from the Commencement Date.
- 1.1.10 "Cost" means all expenditure properly incurred (or to be incurred) by the Contractor, whether on or off the Site, including overheads and similar charges but does not include any allowance for profit.

Other Definitions

- 1.1.11 "Contractor's Equipment" means all machinery, apparatus and other things required for the execution of the Works but does not include Materials or System intended to form part of the Works.
- 1.1.12 "Country" means the Islamic Republic of Pakistan.
- 1.1.13 "Employer's Risks" means those matters listed in Sub-Clause 6.1.
- 1.1.14 "Force Majeure" means an event or situation beyond the control of a Party that is not foreseeable, is unavoidable and its origin is not due to negligence or lack of

care on the part of such Party. Such events subject to the conditions as stated in the preceding sentence may include, but not be limited to, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

- 1.1.15 "Materials" means things of all kinds (other than System) to be supplied and incorporated in the Works by the Contractor.
- 1.1.16 "System" means the machinery and apparatus intended to form or forming part of the Works.
- 1.1.17 "Site" means the place mentioned in the Contract Data where the Works are to be executed, and any other place(s) specified in the Contract as forming part of the Site.
- 1.1.18 "Variation" means a change which is instructed by the Employer under Sub-Clause 10.1.
- 1.1.19 "Works" means any or all the works including design, supply, installation, construction, testing and commissioning of the System to be performed by the Contractor including temporary works and any Variation thereof.
- 1.1.20 "Engineer" means a qualified engineer/engineering firm appointed by the Employer to act as independent engineer for the purpose of the Contract for review of the Contractor Design, equipment inspection and verification of installed System.
- 1.1.21 "Letter of Acceptance" means the formal acceptance by the Employer of the Tender.
- 1.1.22 "Tender" means the Contractor's priced offer to the Employer for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract, as accepted by the Letter of Acceptance.

1.2 Interpretation

Words importing persons or parties shall include firms and organizations. Words importing singular or one gender shall include plural or the other gender where the context requires.

1.3 Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. If an ambiguity or discrepancy is found in the documents, the priority of the documents shall be in accordance with the order as listed in the General Provisions of the Conditions of Contract.

1.4 Law

The rights and obligations of the Parties under the Contract shall be governed by laws of the Islamic Republic of Pakistan.

1.5 Communications

All Communications related to the Contract shall be in English language.

1.6 Statutory Obligations

The Contractor shall comply with the laws of the Islamic Republic of Pakistan and shall give all notices and pay all fees and other charges in respect of the Works.

2. THE EMPLOYER

2.1 Provision of Site

The Employer shall provide the Site and right of access thereto at the times stated in the Contract Data.

2.2 Permits etc.

The Contractor shall be exclusively responsible to apply for and obtain net metering license from NEPRA if so applicable. The Employer shall, if requested by the Contractor, assist him in applying for permits, licenses or approvals which are required for the Works.

2.3 Employer's Instructions

The Contractor shall comply with all instructions given by the Employer, in respect of the Works including the suspension of all or part of the Works.

2.4 Approvals

No approval or consent or absence of comment by the Employer shall affect the Contractor's obligations required under the Contract.

3. EMPLOYER'S REPRESENTATIVES

The Employer shall appoint with precise scope of authority and notify in writing a duly authorized person to act for him and on his behalf for the purposes of this Contract. The details and precise scope of the authority of such authorized person shall be notified in writing to the Contractor immediately after the signing of the Contract.

4. THE CONTRACTOR

4.1 General Obligations

The Contractor shall carry out the Works as per the highest standards of workmanship in the solar industry and in accordance with the terms and conditions of the Contract. The Contractor shall provide all supervision, labour, materials, plant and Contractor's equipment which may be required for the execution of the Works and shall also arrange all permits and licenses at his own cost, required for installation, commissioning and operation of the System.

For avoidance of doubt, the Contractor shall arrange bi-directional meter for the System and bear all related costs.

4.2 Contractor's Representative

The Contractor shall appoint a representative at site on full time basis to

supervise the execution of Works and to receive instructions on behalf of the Contractor but only after obtaining the consent of the Employer for such appointment which consent shall not be unreasonably withheld by the Employer. Such authorized representative may be substituted/replaced by the Contractor at any time during the Contract Period but only after obtaining the consent of the Employer as aforesaid.

4.3 Subcontracting

The Contractor shall not subcontract the whole of the Works. The Contractor may subcontract any part of the Works subject to restriction stipulated in the Contract Data.

4.4 Performance Security

The Contractor shall furnish to the Employer within seven (07) working days after receipt of Letter of Acceptance a Performance Security, in the form of irrevocable & unconditional Bank Guarantee from any Scheduled Bank of Pakistan acceptable to the Employer for the amount and validity specified in Contract Data.

5. DESIGN BY CONTRACTOR

5.1 Submission and Approval of Contractor Design

The Contractor shall promptly submit the Contractor Design to the Employer for approval. Within seven (7) days of receipt, the Employer shall notify any comments or, if the design submitted is not in accordance with the Contract, shall reject it stating the reasons. The Contractor shall not construct any element of the Works designed by him within seven (7) days after the design has been submitted to the Employer or which has been rejected. Design that has been rejected shall be promptly amended and resubmitted.

5.2 Responsibility for Design

Notwithstanding that the Contractor Design is submitted and approved by the Employer, the Contractor shall solely remain responsible for his rendered design under this Contract, which shall not only be in strict conformity with the Employer Design and Specifications but also be fit for the intended purposes defined in the Contract. In addition, the Contractor shall also be solely responsible for any infringement of any patent or copyright in respect of such design.

6. EMPLOYER'S RISKS

6.1 The Employer's Risks

The Employer's Risks are: -

- a) politically motivated riot, commotion or disorder by persons other than the Contractor's personnel and other employees including the personnel and employees of Sub-Contractors, directly affecting the Site and/or the Works;
- b) use or occupation by the Employer of any part of the Works, except

as may be specified in the Contract;

- c) late handing over of Site;
- d) a suspension under Sub-Clause 2.3 unless it is attributable to the Contractor's failure; and

6.2 physical obstructions or physical conditions other than climatic conditions, encountered on the Site during the performance of the Works, for which the Contractor immediately notified to the Employer and accepted by the Employer.

6.3 Loss or Damage due to Employer's Risks

In the event of any such loss or damage happening from any of the risks defined in Sub-Clause 6.1 or force majeure, or in combination with other risks, the Contractor shall, if and to the extent required by the Employer, rectify the loss or damage and the Employer shall determine an addition to the Contract Price in accordance with Clause 10 and shall notify the Contractor accordingly. In the case of a combination of risks causing loss or damage any such determination shall take into account the proportional responsibility of the Contractor and the Employer.

7. TIME FOR COMPLETION

7.1 Execution of the Works

The Contractor shall commence the Works on the Commencement Date and shall proceed expeditiously and without delay and shall complete the Works, subject to Sub-Clause 7.3 below, within the Time for Completion as stated in the Contract Data.

7.2 Programme

Within the time stated in the Contract Data, the Contractor shall submit to the Employer a detailed programme for the Works incorporating the dates, which programme shall be in-line with the Proposed Construction Schedules submitted along with the Bid.

7.3 Extension of Time

The Contractor shall, within such time as may be reasonable under the circumstances, notify the Employer of any event(s) falling within the scope of Sub-Clause 6.1 or 10.3 of these Conditions of Contract and request the Employer for a reasonable extension in the time for the completion of Works. Subject to the aforesaid, the Employer shall determine such reasonable extension in the time for the completion of Works as may be justified in the light of the details/particulars supplied by the Contractor in connection with the such determination by the Employer within such period as may be prescribed by the Employer for the same; and the Employer shall extend the Time for Completion as determined.

7.4 Late Completion

If the Contractor fails to complete the Works within the Time for Completion, the Contractor's only liability to the Employer for such failure shall be to pay the amount stated in the Contract Data for each day for which he fails to complete the Works.

8. TAKING-OVER

8.1 Notice of Completion by the Contractor

The Contractor shall notify in writing to the Employer when he considers that the Works are complete in all aspects.

8.2 Taking-Over Notice

Within ten (10) days of receipt of notice of completion from the Contractor, the Engineer shall determine the conformity of the installed System with the approved Contractor Design and notify the Contractor through Employer that the Works are complete in accordance with the Contract. The Employershall take over the Works upon the issue of this notice and issue Taking Over Certificate to the Contractor.

Alternatively, the Contractor shall be notified that the Works are not ready for taking over, stating the reasons accordingly. The Contractor shall then promptly complete any outstanding work and, subject to Clause 9, clear the site.

8.3 Defect Liability Period

Defect Liability Period shall be as stated in the Contract Data.

9. REMEDYING DEFECTS

9.1 Remedying Defects

The Employer may at any time prior to the expiry of the period stated in the Contract Data, notify the Contractor of any defects. The Contractor shall remedy at no cost to the Employer any defects due to the Contractor Design, Materials, System or workmanship not in accordance with the Contract.

The Cost of remedying defects attributable to any other cause shall be valued as a Variation. Failure to remedy any such defects or complete outstanding work within a reasonable time shall entitle the Employer to carry out all necessary works at the Contractor's cost.

9.2 Uncovering and Testing

The Employer may give instruction as to the uncovering and/or testing of any work. Unless as a result of an uncovering and/or testing it is establishedthat the Contractor Design, Materials, System or workmanship are in accordance with the Contract, the Contractor shall be paid for such uncovering and/or testing as a Variation in accordance with Sub-Clause 10.2.

9.3 The Contractor at his own responsibility shall arrange all hoisting and fixing equipment necessary for the satisfactory completion of work and shall make good any damage to the existing surface.

10. VARIATIONS AND CLAIMS

10.1 Right to Vary

The Employer may instruct Variations.

10.2 Valuation of Variations

Variations shall be valued at a lump sum price mutually agreed between the Parties.

10.3 Early Warning

The Contractor shall notify the Employer in writing as soon as he is aware of any circumstance which may delay or disrupt the Works, or which may give rise to a claim for additional payment.

To the extent of the Contractor's failure to notify, which results to the Employer being unable to keep all relevant records or not taking steps to minimize any delay, disruption, or Cost, or the value of any Variation, the Contractor's entitlement to extension of the Time for Completion or additional payment shall be reduced/rejected.

10.4. **Valuation of Claims**

If the Contractor incurs Cost as a result of any of the Employer's Risks, the Contractor shall be entitled to the amount of such Cost. If as a result of any Employer's Risk, it is necessary to change the Works, this shall be dealt with as a Variation subject to Contractor's notification for intention of claim to the Employer within fourteen (14) days of the occurrence of cause.

10.5 Variation and Claim Procedure

The Contractor shall submit to the Employer an itemized make-up of the value of Variations and claims within twenty-one (21) days of the instruction or of the event giving rise to the claim. The Employer shall check and if possible agree the value. In the absence of agreement on the claim, the Employer shall determine the value.

11. CONTRACT PRICE AND PAYMENT TERMS

11.1 **Contract Price**

The Contract price shall be as provided in the Contract Data.

11.2 Payment Terms and Statements

Subject to the terms and conditions of the Contract, the Contractor shall be entitled to be paid the Contract Price at such intervals as given in the Contract Data.

12. DEFAULT

12.1 **Default by Contractor**

If the Contractor abandons the Works, refuses or fails to comply with a valid instruction of the Employer or fails to proceed expeditiously and without delay, or is, despite a written complaint, in breach of the Contract, the Employer may give notice referring to this Sub-Clause and stating the default.

If the Contractor has not taken all practicable steps to remedy the default within seven (07) days after receipt of the Employer's notice, the Employer may by a second notice given within a further fourteen (14) days, terminate the Contract. The Contractor shall then immediately demobilize from the Site leaving behind any and all Contractor's Equipment which the Employer instructs, in the second notice, to be used for the completion of the Works at the risk and cost of the Contractor.

12.2 Default by Employer

If the Employer fails to pay in accordance with the Contract, or is, despite a written complaint, in breach of the Contract, the Contractor may give notice referring to this Sub-Clause and stating the default. If the default is not remedied within fourteen (14) days after the Employer's receipt of this notice, the Contractor may suspend the execution of all or parts of the Works.

12.3 Insolvency

If a Party is declared insolvent under any applicable law, the other Party may by notice terminate the Contract which shall be effective fourteen (14) days after receipt of notice by the other party. The Contractor shall then immediately demobilize from the Site leaving behind, in the case of the Contractor's insolvency, any Contractor's Equipment which the Employer instructs in the notice is to be used for the completion of the Works.

12.4 Payment upon Termination

After termination, the Contractor shall be entitled to payment of the unpaid balance of the value of the Works executed and of the Materials and System reasonably delivered to the Site, adjusted by the following:

- a) any sums to which the Contractor is entitled under Sub-Clause 10.4,
- b) any sums to which the Employer is entitled,
- c) if the Employer has terminated under Sub-Clause 12.1 or 12.3, the Employer shall be entitled to a sum equivalent to twenty percent (20%) of the value of parts of the Works not executed at the date of the termination, and
- d) if the Contractor has terminated under Sub-Clause 12.2 or 12.3, the Contractor shall be entitled to the cost of his demobilization together with a sum equivalent to ten percent (10%) of the value of parts of the Works executed at the date of termination.

The net balance due shall be paid or repaid within twenty-eight (28) days of the notice of termination.

13. RISKS AND RESPONSIBILITIES

13.1 Contractor's Care of the Works

The Contractor shall take full responsibility for the care of the Works from the Commencement Date until the date of the Employer's issuance of Certificate of Completion under Sub-Clause 8.2. Responsibility shall then

pass to the Employer. If any loss or damage happens to the Works during the above period, the Contractor shall rectify such loss or damage so that the Works conform with the Contract.

Unless the loss or damage happens as a result of any of the Employer's Risks, the Contractor shall indemnify the Employer, or his agents against all claims loss, damage and expense arising out of the Works.

13.2 Force Majeure

If Force Majeure occurs, the Contractor shall notify the Employer immediately. If necessary, the Contractor may suspend the execution of the Works and, to the extent agreed with the Employer demobilize the Contractor's Equipment.

If the event continues for a period of eighty-four (84) days, either Party may then give notice of termination which shall take effect twenty-eight (28) days after the giving of the notice.

After termination, the Contractor shall be entitled to payment of the unpaid balance of the value of the Works executed and of the Materials and System reasonably delivered to the Site, adjusted by the following:

- a) any sums to which the Contractor is entitled under Sub-Clause 10.4,
- b) the cost of his demobilization, and
- c) less any sums to which the Employer is entitled.

The net balance due shall be paid or repaid within thirty-five (35) days of the notice of termination.

14. INSURANCE

At all times during the execution of the Works, the Contractor shall maintain property insurance on the System for the replacement cost thereof, except for items (a) to (e) of the Employer's Risks.

15. RESOLUTION OF DISPUTES

15.1 Employer's Decision

If a dispute of any kind whatsoever arises between the Employer and the Contractor in connection with the Works, the matter in dispute shall, in the first place, be referred in writing to the Employer. Such reference shall state that it is made pursuant to this Clause. No later than the twenty-eight (28) days after the day on which he received such reference, the Employer shall give notice of his decision to the Contractor.

Unless the Contract has already been repudiated or terminated, the Contractor shall, in every case, continue to proceed with the Works with all due diligence, and the Contractor shall give effect forthwith to every such decision of the Employer unless and until the same shall be revised, as hereinafter provided in an arbitral award.

15.2 Notice of Dissatisfaction

If the Contractor is dissatisfied with the decision of the Employer or if no decision is given within the time set out in Sub-Clause 15.1 here above, the Contractor may give notice of dissatisfaction referring to this Sub-Clause within fourteen (14) days of receipt of the decision or the expiry of the time for the decision. If no notice of dissatisfaction is given within the specified time, the decision shall be final and binding on the Contractor. If notice of dissatisfaction is given within the specified time, the decision shall be binding on the Contractor who shall give effect to it without delay unless and until the decision of the Employer is revised by an arbitrator.

15.3 Arbitration

A dispute which has been the subject of a notice of dissatisfaction shall be finally settled as per provisions of Arbitration Act 1940 (Act No. X of 1940) and Rules made thereunder and any statutory modifications thereto. Any hearing shall be held at the place specified in the Contract Data and in the language referred to in Sub-Clause 1.5.

16 INTEGRITY PACT

16.1 If the Contractor, or any of his Sub-Contractors, agents or servants is found to have violated or involved in violation of the Integrity Pact signed by the Contractor as Appendix-E to his Bid, then the Employer shall be entitled to:

- (a) recover from the Contractor an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by the Contractor or any of his Sub-Contractors, agents or servants;
- (b) terminate the Contract; and
- (c) recover from the Contractor any loss or damage to the Employer as a result of such termination or of any other corrupt business practices of the Contractor or any of his Sub-Contractors, agents or servants.

On termination of the Contract under Sub-Para (b) of this Sub-Clause, the Contractor shall immediately demobilize from the Site leaving behind Contractor's Equipment which the Employer instructs, in the termination notice, to be used for the completion of the Works at the risk and cost of the Contractor. Payment upon such termination shall be made under Sub-Clause 12.4, in accordance with Sub-Para (c) thereof, after having deducted the amounts due to the Employer under Sub-Para (a) and (c) of this Sub-Clause.

17. PRIORITY OF CONTRACT DOCUMENTS:

The priority list of contractual documents shall be as follows:

- (a) Contract Agreement;
- (b) Letter of Acceptance;
- (c) Specifications and Employer Design
- (d) Contract Data;
- (e) Conditions of Contract;
- (f) Letters Technical Bid and Price Bid;
- (g) The priced Bill of Quantities; and
- (h) The Appendices to Bid.

CONTRACT DATA
Conditions of Contract

Sr. #	Description	Clause Conditions of Contract	Explanation
1.	Employer's name and address	1.1.4	[To be inserted by the Employer]
2.	Contractor's name	1.1.5	[Name of the Successful Bidder]
3.	Commencement Date	1.1.7	Commencement Date shall be the date when all of the following conditions have been fulfilled: <ol style="list-style-type: none"> 1. The Contractor has submitted to the Employer the advance payment guarantee in accordance with the terms of Conditions of the Contract; 2. The Employer has paid the Contractor the advance payment; and 3. The Site is formally handed over to the Contractor by the Employer by written authorization.
4.	Site	1.1.17	[Employer to insert description of the Site]
5.	Engineer's name and address	1.1.20	
6.	Access to site	2.1	Within two (2) days of signing of Contract
8.	Amount of Performance Security	4.4	As mentioned in data sheet
9.	Validity of Performance Security	4.4	Till the warranty period .
10.	Time for Completion	7.1	Ninety (90) days from the Commencement Date.
12.	Amount of Liquidated Damages	7.4	The rate of the Liquidated Damages (LD) shall be 0.33% of the Contract Price stated in the Letter of Acceptance for every day of delay in which whole or part of the work(s) remained unfurnished subject to a maximum of 5% of the Contract Price.
15.	Contract Price	11.1	As stated in the Letter of Acceptance
16.	Payment Terms	11.2	As mentioned in data sheet
17.	Seat of Arbitration	15.3	Islamabad

INTEGRITY PACT
DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC.
PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN
CONTRACTS WORTH RS. 10.00 MILLION OR MORE

Contract No. _____ Dated _____

Contract Value: _____

Contract Title: _____

..... [name of Contractor] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan (GoP) or any administrative subdivision or agency thereof or any other entity owned or controlled by GoP through any corrupt business practice.

Without limiting the generality of the foregoing, [name of Contractor] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP, except that which has been expressly declared pursuant hereto.

[name of Contractor] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[name of Contractor] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard, [name of Contractor] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by [name of Contractor] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP.

Name of Employer:

Signature:

[Seal]

Name of Contractor:

Signature:

[Seal]