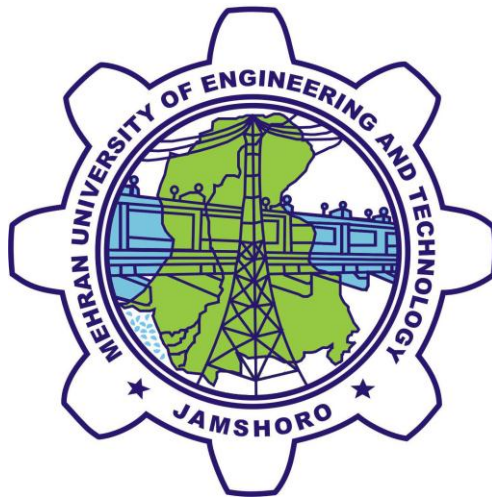


# **MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY, JAMSHORO**

**ISO-9001 : 2015 CERTIFIED**



## **Supplying & Installation of Solar Power System at MUET, Jamshoro**

**(Two Stage - Two Envelope Bidding Procedure)**

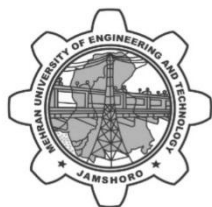
**(National Competitive Bidding)**

# Table of Contents

<b>FORMS OF BID &amp; APPENDICES TO BID</b>	<b>36</b>	<b>3</b>
<b>SCOPE OF WORKS &amp; SYSTEM DESIGN SPECIFICATIONS</b>	<b>60</b>	<b>3</b>
<b>INVITATION FOR BIDS</b>		<b>1</b>
<b>IB.1</b>	<b>Scope of Bid</b>	<b>4</b>
<b>IB.2</b>	<b>Source of Funds</b>	<b>4</b>
<b>IB.3</b>	<b>Eligible Bidders</b>	<b>4</b>
<b>IB.4</b>	<b>One Bid per Bidder</b>	<b>4</b>
<b>IB.5</b>	<b>Cost of Bidding</b>	<b>4</b>
<b>IB.6</b>	<b>Site Visit</b>	<b>4</b>
<b>IB.7</b>	<b>Contents of Bidding Documents</b>	<b>5</b>
<b>IB.8</b>	<b>Clarification of Bidding Documents</b>	<b>5</b>
<b>IB.9</b>	<b>Amendment of Bidding Documents</b>	<b>5</b>
<b>IB.10</b>	<b>Language of Bid</b>	<b>6</b>
<b>IB.11</b>	<b>Documents Comprising the Bid</b>	<b>6</b>
<b>IB.12</b>	<b>Bid Prices</b>	<b>7</b>
<b>IB.13</b>	<b>Currencies of Bid and Payment</b>	<b>8</b>
<b>IB.14</b>	<b>Bid Validity</b>	<b>8</b>
<b>IB.15</b>	<b>Bid Security</b>	<b>8</b>
<b>IB.16</b>	<b>Alternate Proposal by Bidder</b>	<b>9</b>
<b>IB.17</b>	<b>Pre-Bid Meeting</b>	<b>9</b>
<b>IB.18</b>	<b>Format and Signing of Bid</b>	<b>9</b>
<b>IB.19</b>	<b>Sealing and Marking of Bids</b>	<b>10</b>
<b>IB.20</b>	<b>Deadline for Submission of Bids</b>	<b>11</b>
<b>IB.21</b>	<b>Late Bids</b>	<b>11</b>
<b>IB.25</b>	<b>Clarification of Bids</b>	<b>12</b>
<b>IB.26</b>	<b>Examination of Bids and Determination of Responsiveness</b>	<b>12</b>
<b>IB.27</b>	<b>Correction of Errors</b>	<b>12</b>
<b>IB.28</b>	<b>Evaluation and Comparison of Bids</b>	<b>13</b>
<b>IB.30</b>	<b>Employer's Right to Accept any Bid and to Reject any or all Bids</b>	<b>14</b>
<b>IB.31</b>	<b>Notification of Award</b>	<b>14</b>
<b>IB.32</b>	<b>Performance Security</b>	<b>14</b>
<b>IB.33</b>	<b>Signing of Contract Agreement</b>	<b>14</b>
<b>IB.34</b>	<b>General Performance of the Bidders</b>	<b>15</b>
<b>IB.35</b>	<b>Integrity Pact</b>	<b>15</b>
<b>IB.36</b>	<b>Instructions not Part of Contract</b>	<b>15</b>
<b>1.</b>	<b>GENERAL PROVISIONS</b>	<b>22</b>
<b>2.</b>	<b>THE EMPLOYER</b>	<b>24</b>
<b>2.1</b>	<b>Provision of Site</b>	<b>24</b>

1.	EMPLOYER’S REPRESENTATIVES .....	24
2.	THE CONTRACTOR.....	25
3.	DESIGN BY CONTRACTOR .....	25
4.	EMPLOYER’S RISKS .....	26
5.	TIME FOR COMPLETION .....	26
6.	TAKING-OVER .....	27
7.	REMEDYING DEFECTS .....	27
8.	VARIATIONS AND CLAIMS .....	28
9.	CONTRACT PRICE AND PAYMENT TERMS .....	29
10.	DEFAULT .....	29
11.	RISKS AND RESPONSIBILITIES .....	30
12.	INSURANCE.....	31
13.	RESOLUTION OF DISPUTES.....	32
16	INTEGRITY PACT .....	32
17.	PRIORITY OF CONTRACT DOCUMENTS.....	33
	Contract Data.....	34
	<b>FORMS OF BID &amp; APPENDICES TO BID.....</b>	<b>36</b>
	LETTER OF TECHNICAL BID .....	37
	LETTER OF FINANCIAL BID .....	38
	PROPOSED CONSTRUCTION SCHEDULE .....	40
	METHOD OF PERFORMING THE WORKS .....	41
	LIST OF SUBCONTRACTORS .....	42
	ORGANIZATION CHART .....	43
	PAST EXPERIENCE, CURRENT COMMITMENTS, PERSONNEL CAPABILITIES AND FINANCIAL STRENGTH .....	44
	JOINT VENTURE AGREEMENT.....	48
	(INTEGRITY PACT).....	49
	BILL OF QUANTITIES .....	51
	BILL OF QUANTITIES (SUMMARY) .....	52
	BID SECURITY .....	54
	FORM OF PERFORMANCE SECURITY.....	56
	FORM OF CONTRACT AGREEMENT .....	58
	<b>SCOPE OF WORKS &amp; SYSTEM DESIGN SPECIFICATIONS .....</b>	<b>60</b>
	SCOPE OF WORKS & SYSTEM DESIGN SPECIFICATIONS .....	61

## INVITATION FOR BIDS



**MEHRAN UNIVERSITY OF ENGINEERING & TECHNOLOGY,**

**JAMSHORO - 76062, SINDH, PAKISTAN**

**Phone / Fax No. +92 22 2771403**

**Email: nadeem.soomro@admin.muett.edu.pk**

**ISO-9001:2015  
Certified**

**DEPUTY DIRECTOR  
(Procurement)**

**“SAY NO TO CORRUPTION”**

No. & Dated: DD(Proc.)/MUET/JAM/- 182, 17-10-2023

### **NOTICE INVITING TENDERS**

All the interested Contractors / Firms / Parties / Supplier / Venders, Manufacturers and Sole Distributors meeting eligibility criteria, viz. having registration with Federal Board of Revenue (FBR) for Income Tax, Sales Tax in case of procurement of goods, registration with the Sindh Revenue Board in case of procurement of Works and Services and registration with Pakistan Engineering Council as the case may be and not black listed in any procuring agency or authority, are invited to participate in full / item rate tender for the following works:

S#	Name of Work	Estimated Cost	Tender Fee	Completion Time	Earnest Money	Date of Purchase	Date of Submission of Bids	Purchase From
1.	Supplying & Installation of Solar Power System at MUET, Jamshoro.	383.400 (M)	5000/-	04 Months	2%	24-10-2023 To 15-11-2023	16-11-2023 upto 10.30 A.M	Deputy Director (Procurement)
2.	Procurement of Lab Equipment for Electronic Engineering Department at MUET, Jamshoro.	36.383 (M)	5000/-	04 Months	2%	24-10-2023 To 15-11-2023	16-11-2023 upto 11.00 A.M	Deputy Director (Procurement)
3.	Procurement of Lab Equipment for Mechatronic Engineering Department at MUET, Jamshoro	43.185 (M)	5000/-	04 Months	2%	24-10-2023 To 15-11-2023	16-11-2023 upto 11.30 A.M	Deputy Director (Procurement)

The terms and conditions are given as under:-

1. The tender documents can be had from above office or can be downloaded from PPRA website i.e. <https://ppra.org.pk> and University website [www.muett.edu.pk/tenders-notice](http://www.muett.edu.pk/tenders-notice) on the payment noted above (non-refundable) on any working day except the day of opening of tenders. The sealed tenders on prescribed proforma along with earnest money mentioned above of total bid in the form of Pay Order in the form of Pay Order in favour of whom tender was purchased will be opened for Sr. No. 1 on 16-11-2023 @ 11.00 (A.M), Sr. No. 2 on 16-11-2023 @ 11.30 (A.M) and Sr. No. 3 on 16-11-2023 @ 12.00 (Noon) in presence of the representatives, who so ever will be present at that time. In case of any unforeseen situation resulting in closure of office on the date of opening or if Government declares Holiday the tenders shall be submitted / opened on the next working day at the same time & venue. Any conditional or un-accompanied of the earnest money, tender will not be considered in the competition.
2. The Method of Procurement is:  
**Two Stage-Two Envelope bidding procedure for work @ Sr. No. 1. (Technical & Financial)**  
**Single Stage-Two Envelope bidding procedure for works @ Sr. Nos. 2 & 3 (Technical & Financial)**
3. The Bidders are required to submit proposals in accordance with the Technical Evaluation Criteria given in the Bidding Documents.
4. The Bidders should have at least 05 years' experience of same services in any university or large organization.
5. The Bidders should be registered with tax paying agencies which would be verified by concerned agencies.
6. The Bidders should not Black Listed in any procuring agency. (Affidavit is required)
7. The Bidders should have at least Rs. 400.000 (M) annual turnover for work @ Sr. No. 1 and Rs. 50.000 (M) Sr. Nos. 2 & 3 annual turnover of 03 years which would be verified by bank statement. (Attached Annual Turnover Certificate to be issued by the concerned bank).

*The Procuring Agency reserves the right to reject any or all bids subject to relevant provisions of PPRA Rules, 2004, Govt. of Pakistan and may cancel the bidding process at any time prior to the acceptance of a bid or proposal under Rule-33(1) of said Rules.*

***Sd/-***

Deputy Director (Procurement),  
**Mehran University of Engg. & Tech. Jamshoro,**  
**Phone No. 022-2109010 Fax: 022-2771403**  
**Email: nadeem.soomro@admin.muet.edu.pk**

## **INSTRUCTIONS TO BIDDERS**

## **INSTRUCTIONS TO BIDDERS**

(Note: These Instructions to Bidders along with Bidding Data will not be part of the Contract and will cease to have effect once the contract is signed.)

### **A. GENERAL**

#### **IB.1 Scope of Bid**

- 1.1 The Employer as defined in the Bidding Data hereinafter referred to as “the Employer” wishes to receive bids for design, supply, installation, testing & commissioning of Solar Power System at various building roof-tops at main campus Jamshoro as described in these Bidding Documents, and summarized in the Bidding Data hereinafter referred to as the “**Works**”.
- 1.2 The successful bidder will be expected to complete the Works within the time specified in Appendix-A to the Bid.

#### **IB.2 Source of Funds**

- 2.1 The Employer has available to it sufficient resources / funds to completely finance the design, construction and completion of the Works.

#### **IB.3 Eligible Bidders**

- 3.1 This Invitation for Bids is open to all bidders meeting with criteria as defined in the Bid Data Sheet.

#### **IB.4 One Bid per Bidder**

- 4.1 Each bidder shall submit only one bid either by himself, or as a partner in a Joint Venture. A bidder who submits or participates in more than one bid (other than alternatives pursuant to Clause IB.16) will be disqualified.

#### **IB.5 Cost of Bidding**

- 5.1 The bidders shall bear all costs associated with the preparation and submission of their respective bids and the Employer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

#### **IB.6 Site Visit**

- 6.1 The bidders are advised to visit and examine the Site of Works and its surroundings and obtain for themselves on their own responsibility all information that may be necessary for preparing the bid and entering into a contract for the design and construction of the Works. All cost in this respect shall be at the bidder’s own expense.



- 6.2 The bidders and any of their personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such inspection, but only upon the express condition that the bidders, their personnel and agents, will release and indemnify the Employer, his personnel and agents from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of such inspection.

**B. BIDDING DOCUMENTS**

**IB.7 Contents of Bidding Documents**

- 7.1 The Bidding Documents, in addition to invitation for bids, are those stated below and should be read in conjunction with any Addenda issued in accordance with Clause IB.9.
1. Instructions to Bidders.
  2. Bidding Data.
  3. Conditions of Contract.
  4. Form of Bid & Appendices to Bid.
  5. Bill of Quantities (Appendix-H to Bid).
  6. Form of Bid Security.
  7. Forms of Performance Security.
  8. Form of Contract Agreement.
  9. Site Specific Information, Scope of Works & System Design Specifications.
- 7.2 The bidders are expected to examine carefully the contents of all the above bidding documents. Failure to comply with the requirements of bid submission will be at the Bidder's own risk. Pursuant to Clause IB.26, bids which are not substantially responsive to the requirements of the Bidding Documents will be rejected.

**IB.8 Clarification of Bidding Documents**

- 8.1 Any prospective bidder requiring any clarification(s) in respect of the Bidding Documents may notify the Employer in writing at the Employer's address indicated in the Invitation for Bids. The Employer will respond to any request for clarification which he receives at least five (5) days prior to the deadline for submission of bids.
- 8.2 Copies of the Employer's response will be forwarded to all purchasers of the Bidding Documents, including a description of the enquiry but without identifying its source.

**IB.9 Amendment of Bidding Documents**

- 9.1 At any time prior to the deadline for submission of bids, the Employer may, for any reason, whether at his own initiative or in response to a clarification requested by a prospective bidder, modify the Bidding Documents by issuing addendum.

- 9.2 Any addendum thus issued shall be part of the Bidding Documents pursuant to Sub-Clause 7.1 hereof and shall be communicated in writing to all purchasers of the Bidding Documents. Prospective bidders shall acknowledge receipt of each addendum in writing to the Employer.
- 9.3 To afford prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may extend the deadline for submission of bids in accordance with Clause IB.20

## **C. PREPARATION OF BIDS**

### **IB.10 Language of Bid**

- 10.1 The bid and all correspondence and documents related to the bid exchanged by a bidder and the Employer shall be in the bid language stipulated in the Bidding Data and particular Conditions of Contract. Supporting documents and printed literature furnished by the bidders may be in any other language provided the same are accompanied by an accurate translation of the relevant parts in the bid language, in which case, for purposes of evaluation of the bid, the translation in bid language shall prevail.

### **IB.11 Documents Comprising the Bid**

- 11.1 The Bid shall comprise two envelopes submitted simultaneously, one called the **Technical Bid** and the other **Financial Bid**, containing the documents listed in Bidding Data under the heading of 11.1 A & B respectively. Both envelopes to be enclosed together in an outer single envelope called the Bid. Each bidder shall furnish all the documents as specified in Bidding Data at 11.1 A & B.
- 11.2 Bids submitted by a Joint Venture (JV) shall include a copy of the JV Agreement entered into by all partners. Alternatively, a letter of intent to execute a JV Agreement in the event of a successful bid shall be signed by all partners and submitted with the bid, together with a copy of the proposed agreement. The role to be played by each partner to be specified therein. Bids submitted by a JV of two (2) or more firms shall comply with the following requirements:
- (a) In case of successful bid, the form of JV Agreement shall be signed and be registered as per law so as to be legally binding on all partners within 7 days of the receipt of Letter of Acceptance failing which the contract and the Letter of Acceptance shall stand void and redundant.
  - (b) One of the JV partners shall be nominated as being in charge who must be registered with AEDB under AEDB (Certification in category C1) Regulations 2021 and this Authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the JV partners. In case of a company submitting chain of Authority including board resolution to this effect or any authorization required under the law shall be mandatory.
  - (c) The partners-in-charge shall always be duly authorized to deal with the employer regarding all matters related with and/or incidental to the execution of works as per the terms and conditions of JV Agreement and in this regard to incur any and all liabilities, receive instructions, give

binding undertakings and receive payments on behalf of the JV.

- (d) All partners of the JV shall at all times and under all circumstances be liable jointly and severally for the execution of the Contract in accordance with the Contract terms and a statement to this effect shall be included in the authorization mentioned under Sub-Para (b) above as well as in the Form of Bid and in the Form of JV Agreement (in case of a successful bid); and
  - (e) A copy of JV Agreement shall be submitted before signing of the Contract, stating the conditions under which JV will function, its period of duration, the persons authorized to represent and obligate it and which persons will be directly responsible for due performance of the Contract and can give valid receipts on behalf of the JV, and any other information necessary to permit a full appraisal of its functioning. The JV agreement shall be deemed part of the Contract. No amendments/modifications whatsoever in the JV agreement shall be agreed to between the JV partners without prior written consent of the Employer.
- 11.3 The Bidder shall furnish, as part of the Technical Bid, a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in the Bidding Forms, in sufficient detail to demonstrate the adequacy of Bidders' proposal to meet the Works requirements and the completion time referred to in sub-clause 1.2 hereof.

#### **1B.12 Bid Prices**

- 12.1 Unless stated otherwise in the Bidding Documents, the Contract shall be for the whole of the Works as described in Sub-Clause 1.1 hereof, based on total price of the Project worked out from the unit rates submitted by the bidder divided by capacity of the offered System. The formula for evaluation of bids is provided in the Bidding Data.
- 12.2 The bidders shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by a bidder will not be paid for by the Employer when executed and shall be deemed covered by rates and prices for other items in the Bill of Quantities.
- 12.3 All duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause shall be included in the rates and prices and the total Bid Price submitted by a bidder. After the date of signing of the Contract, any additional / reduced duties, taxes and levies due to subsequent additions or changes in legislation shall be reimbursed / deducted.
- 12.4 The rates and prices quoted by the bidders are subject to adjustment during the performance of the Contract as per actual work carried out at site.

### **IB.13 Currencies of Bid and Payment**

13.1 The unit rates and the prices shall be quoted by the bidders entirely in Pak rupees.

### **IB.14 Bid Validity**

- 14.1 Bids shall remain valid for the period stipulated in the Bidding Data after the Date of Bid Opening specified in Clause IB.23.
- 14.2 In exceptional circumstances, prior to expiry of the original bid validity period, the Employer may request that the bidders extend the period of validity for a specified additional period which shall in no case be more than the original bid validity period. The request and the responses thereto shall be made in writing. A bidder may refuse the request without forfeiting his Bid Security. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his Bid Security for the period of the extension, and in compliance with Clause IB.15 in all respects.

### **IB.15 Bid Security**

- 15.1 Each bidder shall furnish, as part of his bid, a Bid Security in the amount stipulated in the Bidding Data in Pak Rupees or an equivalent amount in a freely convertible currency.
- 15.2 The Bid Security shall be, at the option of the bidder, in the form of Bank Guarantee issued by a Scheduled Bank in Pakistan or from a foreign bank duly counter guaranteed by a Scheduled Bank in Pakistan in favor of the Employer valid for a period thirty (30) days beyond the Bid Validity date.
- 15.3 Any bid not accompanied by an acceptable Bid Security shall be rejected by the Employer as non-responsive.
- 15.4 The bid securities of unsuccessful bidders will be returned as promptly as possible, but not later than thirty (30) days after the expiration of the period of Bid Validity.
- 15.5 The Bid Security of the successful bidder will be returned when the bidder has furnished the required Performance Security and signed the Contract.
- 15.6 The Bid Security may be forfeited:
- (a) if the bidder withdraws his bid except as provided in Sub-Clause 22.1;
  - (b) if the bidder does not accept the correction of his Bid Price pursuant to Sub-Clause 27.2 hereof; or

- (c) In case of successful bidder, if he fails within the specified time limit to:
  - (i) furnish the required Performance Security; or
  - (ii) sign the Contract.
  - (iii) Furnish the required JV agreement within seven (7) Days of the receipt of Letter of Acceptance.

#### **IB.16 Alternate Proposal by Bidder**

- 161 Should any bidder consider that he can offer any advantages to the Procuring Agency by a modification to the specifications or other conditions, he may, in addition to his bid to be submitted in strict compliance with the Bidding Documents, submit any Alternate Proposal(s) containing (a) relevant design calculations; (b) technical specifications; (c) proposed construction methodology; and (d) any other relevant details / conditions, provided always that the total sum entered on the Form of Bid shall be that which represents complete compliance with the Bidding Documents. The technical details and financial implications involved are to be submitted in two separate sealed envelopes as to be followed in main bid proposals.
- 162 Alternate Proposal(s), if any, of the lowest evaluated responsive bidder may only be considered by the Procuring Agency as the basis for the award of Contract to such bidder.

#### **IB.17 Pre-Bid Meeting**

- 171 The Employer may, on his own motion or at the request of any prospective bidder(s), hold a pre-bid meeting to clarify issues and to answer any questions on matters related to the Bidding Documents. The date, time and venue of pre-bid meeting, if convened, is as stipulated in the Bidding Data. All prospective bidders or their authorized representatives shall be invited to attend such a pre-bid meeting.
- 172 The bidders are requested to submit questions, if any, in writing so as to reach the Employer not later than seven (7) days before the proposed pre-bid meeting.
- 173 Minutes of the pre-bid meeting, including the text of the questions raised and the replies given, will be transmitted without delay to all purchasers of the Bidding Documents. Any modification of the Bidding Documents listed in Sub-Clause 7.1 hereof which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause IB.9 and not through the minutes of the pre-bid meeting.
- 174 Absence at the pre-bid meeting will not be a cause for disqualification of a bidder.

#### **IB.18 Format and Signing of Bid**

- 18.1 Bidders are particularly directed that the amount entered on the Form of Bid shall be for performing the Contract strictly in accordance with the Bidding Documents.

- 18.2 All appendices to Bid are to be properly completed and signed.
- 18.3 No alteration is to be made in the Form of Bid nor in the Appendices thereto except in filling up the blanks as directed. If any such alterations be made or if these instructions be not fully complied with, the bid may be rejected.
- 18.4 Each bidder shall prepare by filling out the forms completely and without alterations one (1) original and one (1) copy of the documents comprising the bid and clearly mark them "ORIGINAL" and "COPY" as appropriate. In the event of discrepancy between them, the original shall prevail.
- 18.5 The original and the copy of the bid shall be typed or written in indelible ink (in the case of copies, Photostats are also acceptable) and shall be signed by 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 Bidding Data 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 signed or initiated by the person signing the bid.
- 18.6 The bid shall contain no alterations, omissions or additions, except to comply with instructions issued by the Employer, or as are necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.
- 18.7 Bidders shall indicate in the space provided in the Form of Bid their full and proper addresses at which notices may be legally served on them and to which all correspondence in connection with their bids and the Contract is to be sent.
- 18.8 Bidders should retain a copy of the Bidding Documents as their file copy.

**D. SUBMISSION OF BIDS**

**IB.19 Sealing and Marking of Bids**

- 19.1 Each bidder shall submit his bid as under:
- (a) ORIGINAL and the copy of the Bid shall be separately sealed and put in separate envelopes and marked as such.
  - (b) The envelopes containing the ORIGINAL and copy will be put in one sealed envelope and addressed / identified as given in Sub- Clause 19.2 hereof.
  - (c) The technical bid should comprise of documents listed in 11.1 (A) of Bidding Data & the price bid should comprise of documents listed in 11.1 (B) of Bidding Data which shall be placed in separate envelopes in accordance with 11.1.

- 19.2 The inner and outer envelopes shall:
- (a) be addressed to the Employer 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
  - (c) provide a warning not to open before the time and date for bid opening, as specified in the Bidding Data.
- 19.3 In addition to the identification required in Sub- Clause 19.2 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.21
- 19.4 If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.

#### **IB.20 Deadline for Submission of Bids**

- 201 (a) Bids must be received by the Employer at the address specified no later than the time and date stipulated in the Bidding Data or such extended deadline as the Employer has duly notified in accordance with Clause IB.9.
- (b) Bids with charges payable will not be accepted, nor will arrangements be undertaken to collect the bids from any delivery point other than that specified above. Bidders shall bear all expenses incurred in the preparation and delivery of bids. No claims will be entertained for refund of such expenses.
- (c) Where delivery of a bid is by mail and the bidder wishes to receive an acknowledgment of receipt of such bid, he shall make a request for such acknowledgment in a separate letter attached to but not included in the sealed bid package.
- (d) Upon request, acknowledgment of receipt of bids will be provided to those making delivery in person or by messenger.
- 202 The Employer may, at his discretion, extend the deadline for submission of bids by issuing an amendment in accordance with Clause IB.9, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

#### **IB.21 Late Bids**

- 21.1 (a) Any bid received by the Employer after the deadline for submission of bids prescribed in Clause IB.20 will be returned unopened to such bidder.
- (b) Delays in the mail, delays of person in transit, or delivery of a bid to the wrong office shall not be accepted as an excuse for failure to deliver a bid at the proper place and time. It shall be the bidder’s responsibility to determine the manner in which timely delivery of his bid will be accomplished either in person, by messenger or by mail.

## **IB.25 Clarification of Bids**

- 25.1 To assist in the examination, evaluation and comparison of bids, the Employer may, at his discretion, ask any bidder for clarification of his bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids in accordance with Clause IB.28.
- 25.2 If a bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its bid may be rejected.

## **IB.26 Examination of Bids and Determination of Responsiveness**

- 26.1 Prior to the detailed evaluation of bids, the Employer will determine whether each bid is substantially responsive to the requirements of the Bidding Documents.
- 26.2 A substantially responsive bid is one which (i) meets the eligibility and qualification criteria under the Bidding Documents; (ii) has been properly signed; (iii) is accompanied by the required Bid Security; and (iv) conforms to all the terms, conditions and specifications of the Bidding Documents, without material deviation or reservation. A material deviation or reservation is one (i) which affect in any substantial way the scope, quality or performance of the Works; (ii) which limits in any substantial way, inconsistent with the Bidding Documents, the Employer's rights or the bidder's obligations under the Contract; or (iii) adoption/rectification whereof would affect unfairly the competitive position of other bidders presenting substantially responsive bids. Only substantially responsive bids shall be considered for further evaluation.
- 26.3 If a bid is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation. The Employer may, however, seek confirmation / clarification in writing which shall be responded in writing.

## **IB.27 Correction of Errors**

- 27.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:
- (a) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern; and
  - (b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern, unless in the opinion of the Employer there is an obviously gross misplacement of the decimal point in the unit rate, in which case the line item total as quoted will govern and the unit rate will be corrected.



- 27.2 The amount stated in the Form of Bid will be adjusted by the Employer 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 Bid Price, his Bid will be rejected, and the Bid Security shall be forfeited in accordance with Sub- Clause 15.6(b) hereof.

## **IB.28 Evaluation and Comparison of Bids**

- 28.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause IB.26.
- 28.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
- (a) Making any correction for errors pursuant to Clause IB.27;
  - (b) Excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities, but including competitively priced Day work; and
  - (c) Making an appropriate adjustment for any other acceptable Variation or deviation.
- 28.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.
- 28.4 If the Bid of the successful bidder is seriously unbalanced in relation to the Employer's estimate of the cost of work to be performed under the Contract, the Employer may require the bidder to produce detailed price analysis for any or all items of the Bill of Quantities to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, the Employer may require that the amount of the Performance Security set forth in Clause IB.32 be increased at the expense of the successful bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful bidder under the Contract.

## **E. AWARD OF CONTRACT**

### **IB.29 Award**

- 29.1 Subject to Clauses IB.30 and IB.34, the Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the Bidding Documents and who has offered the lowest evaluated Bid Price, provided that such bidder has been determined to be eligible in accordance with the provisions of Clause IB.3 and qualify pursuant to criteria provided in the Bidding Documents.
- 29.2 The Employer, at any stage of the bid evaluation, having credible reasons for or *prima facie* evidence of any defect in supplier's or contractor's capacities, may require the suppliers or contractors to provide information concerning their professional, technical, financial, legal or managerial competence whether already pre-qualified or not:

Provided that such qualification shall only be laid down after recording reasons therefor in writing. They shall form part of the records of that bid evaluation report.

### **IB.30 Employer's Right to Accept any Bid and to Reject any or all Bids**

- 30.1 Notwithstanding anything contained herein, the Employer reserves the right to accept or reject any Bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidders or any obligation except that the grounds for rejection of all bids shall upon request be communicated to any bidder who submitted a bid, without justification of grounds. Rejection of all bids shall be notified to all bidders promptly.

### **IB.31 Notification of Award**

- 31.1 Prior to expiration of the period of bid validity prescribed by the Employer, the Employer will notify the successful bidder in writing ("Letter of Acceptance") that his Bid has been accepted. This letter shall name the sum which the Employer will pay the Contractor in consideration of the execution and completion of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Conditions of Contract called the "Contract Price").
- 31.2 No Negotiation with the bidder having evaluated as lowest responsive or any other bidder shall be permitted.
- 31.3 The notification of award and its acceptance by the bidder will constitute the formation of the contract, binding the Employer and the bidder till signing of the formal Contract.
- 31.3 Upon furnishing by the successful bidder of a Performance Security, the Employer will promptly notify the other bidders that their Bids have been unsuccessful and return their bid securities.

### **IB.32 Performance Security**

- 32.1 The successful bidder shall furnish to the Employer a Performance Security in the form and the amount stipulated in the Bidding Data and the Conditions of Contract within a period of seven (7) days after the receipt of Letter of Acceptance.
- 32.2 Failure of the successful bidder to comply with the requirements of Sub-Clause IB.32.1 or Clauses IB.33 or IB.35 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.

### **IB.33 Signing of Contract Agreement**

- 33.1 Within seven (7) days from the date of furnishing of acceptable Performance Security under the Conditions of Contract, the Employer will send the successful bidder the Contract in the form provided in the Bidding Documents, incorporating all agreements between the parties.

- 332 The formal Contract between the Employer and the successful bidder shall be executed within seven (7) days of the receipt of the Contract by the successful bidder from the Employer.

#### **IB.34 General Performance of the Bidders**

The Employer reserves the right to obtain information regarding performance of the bidders on their previously awarded contracts/works. The Employer may in case of consistent poor performance of any Bidder as reported by the employers of the previously awarded contracts, *inter alia*, reject his bid and/or refer the case to the AEDB. Upon such reference, AEDB in accordance with its rules/ regulations take such action as may be deemed appropriate under the circumstances of the case including black listing of such Bidder.

#### **IB.35 Integrity Pact**

The Bidder shall sign and stamp the Integrity Pact provided at Appendix-G to Bid in the Bidding Documents for all Federal Government procurement contracts exceeding Rupees ten million. Failure to provide such Integrity Pact shall make the bidder non-responsive.

#### **IB.36 Instructions not Part of Contract**

Bids shall be prepared and submitted in accordance with these Instructions which are provided to assist bidders in preparing their bids, and do not constitute part of the Bid or the Contract Documents.

## **BIDDING DATA**

## BIDDING DATA

The information in this section is complementary to, amends or supplements the provisions in the provisions in the instruction to Bidder. Whenever there is conflict, the provisions herein shall take precedence over those in the Instructions to Bidders.

Reference to instruction to Bidder	Bidding Data
<b>IB-I</b> 1.1	<p><b>Name of the Project &amp; Summary of the Works</b></p> <p><b>“Supply &amp; Installation of Solar Power System at MUET, Jamshoro”</b></p> <p>Mehran University of Engineering &amp; Technology, Jamshoro extends an invitation from esteemed firms to participate in a competitive bid for a turnkey project (Two Stage-Two Envelope Bidding Procedure) basis for the installation of solar power systems on the rooftops of various buildings within our University’s main campus at Jamshoro. The project encompasses a comprehensive assessment of building load calculations and the design and implementation of a sustainable solar power system. Our objective is to harness sustainable solar energy to meet a portion of our energy requirements and contribute to a greener future.</p> <p>The university is seeking proposals well reputed firms to deliver a turnkey solar power solution, specifying the amount of kilowatt (KW) capacity achievable and two (02) years’ Service Level Agreement (SLA) within the fixed budget. The bid should include a clear breakdown of costs associated with the installation and provide detailed projections of power generation in KW in the budgeted amount. Your proposal should showcase your firm's technical expertise, cost efficiency, and commitment to meet project timelines.</p> <p><b><u>BASIC REQUIREMENTS FOR FIRMS TO PARTICIPATE IN THE BID</u></b></p> <p>The interested firms should fulfill the following Criteria to meet the eligibility for participation in the bidding process.</p> <ol style="list-style-type: none"> <li>1. Registered with Security Exchange Commission of Pakistan (SECP).</li> <li>2. Registered with Sindh Revenue Board (SRB).</li> <li>3. Registered with FBR / NTN / Sales Tax Number.</li> <li>4. Registration with Pakistan Engineering Council (PEC) in C3 Category having specific codes of EE04, EE06, EE11 and related specialization codes related to Solar power Energy Installation.</li> <li>5. At least two (02) similar works of cost not less than Rs. 400 Million completed by the firm during last five (05) years indicating total cost of such works along with date of start and completion.</li> </ol>

	<p>6. Audited statements of accounts for the last five (05) years.</p> <p>7. A certificate / affidavit that the firm is not blacklisted or involved in litigation by any public or private sector organization in Pakistan.</p> <p>8. The winning firm will be required to provide documents of materials / equipment imported directly or indirectly from outside Pakistan (LC's, Custom Clearance &amp; invoices of purchase from origin country.)</p> <p>9. Firm agency and not the individual shall must be registered with Alternative Energy Development Board (AEDB) in category C1.</p> <p><b><u>LIST OF BUILDINGS FOR INSTALLATION OF SOLAR POWER</u></b></p> <p>1. Main Administration Building</p> <p>2. Department of Civil Engineering</p> <p>3. Department of Electrical Engineering</p> <p>4. Department of Mechanical Engineering</p> <p>5. Department of City &amp; Regional Planning</p> <p>6. Department of Architecture</p> <p>7. Gymnasium &amp; Sports Complex</p> <p>8. Research &amp; Development Centre – I</p> <p>9. Research &amp; Development Centre - II</p> <p>10. Department of Software Engineering</p> <p>11. Department of Computer System Engineering</p> <p>12. Institute of Information Technology</p> <p>13. Institute of Communication Technologies</p> <p>14. Department of Electronic Engineering</p> <p>15. Institute of Communication &amp; Processing Centre</p> <p>16. Science &amp; Technology Park Building</p> <p>17. Pumping Station @ K.B Feeder</p>
1.1	<p><b>Name and Address of Employer</b></p> <p>Mehran University of Engineering &amp; Technology, Jamshoro, Sindh.</p>
IB-10 10.1	<p><b><u>Bid Language:</u></b></p> <p>English</p>

IB-11 11.1	<b><u>11.1(A)</u></b>
	The Bidder shall submit with its Technical Bid the following documents:
	Copy of registration certificate with Securities & Exchange Commission of Pakistan (SECP) <b>(MANDATORY)</b>
	Copy of registration certificate of Firm with Professional Body i.e. PEC with minimum 5 years post registration working experience <b>(MANDATORY)</b>
	National Tax Number / Free Tax Number Certificates in the name of organization mentioned and certificate attached <b>(MANDATORY)</b>
	Copy of Registration Certificate with Sindh Revenue Board (SRB). <b>(MANDATORY)</b>
	Audited Financial Statements / Accounts Statements showing Financial Position of last Five (05) Years. <b>(MANDATORY)</b>
	Bank Statements of firms accounts of last Five (05) years starting from 30 <sup>th</sup> September 2018 to 30 <sup>th</sup> September 2023. <b>(MANDATORY)</b>
	Letter of Association / Consortium, if applicable attached.
	Copy of Work Orders and Completion / Performance Certificates of the completed projects / projects in hand. <b>(MANDATORY)</b>
	Declaration by authorized person to submit the Bid signed & attached.
	Detailed Description of Approach, Methodology and Work Plan for Performing the Assignment <b>(MANDATORY)</b>
	Detailed CVs of the Core Staff that will be assigned for the assignment and working with the firm for last three (03) years along with copies of qualification certificates (Degrees, PEC certificate & other.) <b>(MANDATORY)</b>
	Registration certificates with Autonomous bodies / Private Entities (National or International)
	Affidavit on stamp paper of Rs. 100/- that the firm is not blacklisted or in litigation by/with any public or private sector organization in Pakistan. <b>(MANDATORY)</b>
	Copy of Registration Certification with AEDB (C1 Category) <b>(MANDATORY)</b>
(a) Letter of Technical Bid (b) Bid Security (IB.15) (c) Written confirmation authorizing the signatory of the Bid to commit the Bidder(1B.18.5) (d) Pending litigation information that may have impact on the Bid or Bidding process (e) Proposed Construction Schedule (Appendix-A) (f) Method of Performing the Works (Appendix-B) (g) Organization Chart for Supervisory Staff (Appendix-D) (i) Eligibility, Past Performance, Current Commitments, Personnel Capabilities and Financial Strength (Appendix-E) (j) Joint Venture Agreement (if applicable) (Appendix-F) (k) Integrity Pact (Appendix-G)	

	<p><b><u>11.1 (B)</u></b></p> <p>The Bidder shall submit with its Financial Bid the following documents:</p> <p>(a) Letter of Financial Bid</p> <p>(b) Bill of Quantities (Appendix-H)</p>
<b>IB-12</b>	<p><b><u>Bid Evaluation Criteria shall be as follows:</u></b></p> <p>Bid Quantity = Total KW Solar Power System offered</p>
<b>IB-14 14.1</b>	<p><b><u>Bid Validity</u></b></p> <p>Period of Bid Validity is 90 days after the date of Bid Opening.</p>
<b>IB-15 15.1</b>	<p><b><u>Bid Security</u></b></p> <p>Amount of Bid Security is 2% of the estimated cost</p> <p>The Bid security shall be in the form of Bank Guarantee issued by a schedule Bank of Pakistan.</p>
<b>IB-17 17.1</b>	<p><b><u>Pre-Bid Meeting</u></b></p> <p>If needed</p>
<b>IB-19 19.2 (a)</b>	<p><b><u>Employer address for the purpose of Bid submission:</u></b></p> <p>Office of the Deputy Director (Procurement), Directorate of Works &amp; Strategic Planning, Mehran University of Engineering &amp; Technology, Jamshoro, Sindh, Pakistan.</p>
<b>IB-20 20.1</b>	<p><b><u>Deadline for submission of Bids:</u></b></p> <p>As notified in the time and date for submission of Bids at or before <b>10:30 A.M</b> on or before <b>16<sup>th</sup> November, 2023</b> (or otherwise as notified in the letter of invitation for Bids)</p>
<b>IB-32 32.1</b>	<p><b><u>Performance Security:</u></b></p> <p>Amount of Performance Security is 5%</p>
<b>IB.37 Sufficiency of Bid</b>	<p>Following clauses are added in Instruction of bidders:</p> <p>Each Bidder shall be deemed to have satisfied fully, before submitting the Bid, as to all aspects of the works, correctness and sufficiency of his Bid and of rates and prices stated in the Bills of Quantities, which a rates and prices shall, except in so far as it is otherwise expressly provided in the Contract, cover all his obligations under the Contract and all matters and things necessary for the proper completion of Works.</p> <p>Objections, excuses or claims made by the bidder after submission of his Bid to the Employer shall not be entertained.</p>



<b>IB.38 Sub-Contractors</b>	Any Sub-Contractor is subject to the acceptance of the Employer and the Sub-Contract shall be subject to the same Conditions of Contract as the main Contract. A list, as set forth in Appendix “I” showing the name and address and credentials of each proposed sub-Contractor, the type of work to be sub-let and the reason for sub-letting shall be submitted with the Bid. Overall responsibility of all works, whether parts of it subcontracted or not, shall rest with the Bidder.
<b>IB.39 Taxes &amp; Duties</b>	The Bidder shall obtain all information as to Pakistan Income Tax, Sales Tax, Sindh Revenue Board Tax, and any other taxes imposed by the local bodies, export and import duties, import surcharge, iqra surcharge, etc. and necessary permits and confirm the requirements thereof at his own responsibility and include all such cost in his Bid price. The quoted rate shall also include the cost of accepting the general risks/liabilities and obligations set forth or implied in the Contract.
<b>IB.40 Insurance</b>	The Bidder shall estimate the amounts required to be provided for all the insurances under the Contract from approved insurers, and the Bid Price shall be deemed to include all such amounts.

# **CONDITIONS OF CONTRACT**

# **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 in the Contract.
- 1.1.2 “Specifications” means the document as listed in the Bidding Documents, including Employer’s requirements in respect of design to be carried out by the Contractor (if any), and any Variation to such document.
- 1.1.3 “Drawings” means the Employer’s approved drawings of the Works as listed in the Contract Data, and any Variation to such drawings.

#### **Persons**

- 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 and the legal successors in title to this person, but not (except with the consent of the Employer) any assignee.
- 1.1.6 “Party” means either the Employer or the Contractor.

#### **Dates, Times and Periods**

- 1.1.7 “Commencement Date” means the date fourteen (14) days after the date the Contract comes into effect or any other date named in the Contract Data.
- 1.1.8 “Day” means a calendar day
- 1.1.9 “Time for Completion” means the time for completing the Works as stated in the Contract Data (or as extended under Sub-Clause 7.3), calculated from the Commencement Date.

#### **Money and Payments**

- 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 circumstance which makes performance of a Party’s obligations illegal or impracticable and which is beyond that Party’s reasonable control.
- 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 places provided by the Employer where the Works are to be executed, and any other places specified in the Contract as forming part of the Site.
- 1.1.18 “Variation” means a change which is instructed by the Engineer/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 the person notified by the Employer to act as Engineer for the purpose of the Contract and named as such in Contract Data.

## **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 Employer shall, if requested by the Contractor, assist him in applying for permits, licenses or approvals which are required for the Works.

### **2.3 Engineer / 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 Engineer/Employer shall affect the Contractor's obligations.

## **3. EMPLOYER'S REPRESENTATIVES**

### **3.1 Authorized Person**

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. Such authorized person shall be duly identified in the Contract Data or otherwise notified in writing to the Contractor as soon as he is so appointed. In either case the Employer shall notify the Contractor, in writing, the precise scope of the authority of such authorized person at the time of his appointment.

### **3.2 Engineer / Employer's Representative**

The name and address of Engineer / Employer's Representative is given in Contract Data. However, the Contractor shall be notified by the Engineer/Employer, the delegated duties and authority before the Commencement of Works.

## **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.

### **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 unreasonable 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 ten (10) days after receipt of Letter of Acceptance a Performance Security, in the form of Bank Guarantee having latest AA rating from PACRA for the amount and validity specified in Contract Data.

## **5. DESIGN BY CONTRACTOR**

### **5.1 Contractor's Design**

The Contractor shall carry out detail design of the Project to the extent specified, as referred to in the Bidding Documents and promptly submit the same to the Engineer/Employer. Within seven (7) days of receipt the Engineer/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 Engineer/Employer or which has been rejected. Design that has been rejected shall be promptly amended and resubmitted. The Contractor shall resubmit all designs commented on taking these comments into account as necessary.

## **5.2 Responsibility for Design**

The Contractor shall remain responsible for his tendered design and the design under this Contract, both of which shall be fit for the intended purposes defined in the Contract and he shall also remain responsible for any infringement of any patent or copyright in respect of the same. The Engineer/Employer shall be responsible for the approval of the design including Drawings submitted by the Contractors.

## **6. EMPLOYER'S RISKS**

### **6.1 The Employer's Risks**

The Employer's Risks are: -

- a) riot, commotion or disorder by persons other than the Contractor's personnel and other employees including the personnel and employees of Sub-Contractors, 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 sites;
- d) a suspension under Sub-Clause 2.3 unless it is attributable to the Contractor's failure; and
- e) 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.

## **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 Engineer/Employer a programme for the Works in the form stated in the Contract Data.

### **7.3 Extension of Time**

The Contractor shall, within such time as may be reasonable under the circumstances, notify the Employer/Engineer of any event(s) falling within the scope of Sub-Clause 6.1 or 10.3 of these Conditions of Contract and request the Engineer / Employer for a reasonable extension in the time for the completion of Works. Subject to the aforesaid, the Engineer/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 Engineer / Employer within such period as may be prescribed by the Engineer / 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 Completion**

The Contractor may notify the Engineer/Employer when he considers that the Works are complete.

#### **8.2 Taking-Over Notice**

The Engineer/Employer shall, subject to prior approval of the Employer, notify the Contractor when he considers that the Contractor has completed the works stating the date accordingly. Alternatively, the Engineer/ Employer may notify the Contractor that the works are not ready for taking over, stating the reasons accordingly.

The Employer shall take over the works upon the issue of this notice and issue Taking Over Certificate to the Contractor. The Contractor shall 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 or the Engineer 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's 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 Engineer/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 established that the Contractor's design, Materials, System or workmanship are not 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 Engineer/Employer may instruct Variations.

### **10.2 Valuation of Variations**

Variations shall be valued as follows:

- a) at a lump sum price agreed between the Parties, or
- b) where appropriate, at rates in the Contract, or
- c) in the absence of appropriate rates, the rates in the Contract shall be used as the basis for valuation, or failing which at appropriate new rates, as may be agreed or which the Engineer/Employer considers appropriate, or
- e) if the Engineer/Employer so instructs, at day work rates set out in the Contract Data for which the Contractor shall keep records of hours of labour and Contractor's Equipment, and of Materials, used.

### **10.3 Early Warning**

The Contractor shall notify the Engineer/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 Engineer/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 Engineer/Employer within fourteen (14) days of the occurrence of cause.

### **10.5 Variation and Claim Procedure**

The Contractor shall submit to the Engineer/Employer an itemized make-up of the value of Variations and claims within twenty-eight (28) days of the instruction or of the event giving rise to the claim. The Engineer/Employer shall check and if possible agree the value. In the absence of agreement, the

Employer shall determine the value.

## **11. CONTRACT PRICE AND PAYMENT TERMS**

### **11.1 Contract Price**

Payment of the Contract price shall be as provided in the Contract Data.

### **11.2 Payment Terms and Statements**

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 Engineer/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 fourteen (14) days after receipt of the Employer's notice, the Employer may by a second notice given within a further twenty-one (21) 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 immediately. 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 not 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 Engineer's/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 Engineer/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**

### **14.1 Arrangements**

The Contractor shall, prior to commencing the Works, obtain and maintain insurances of the types, in the amounts and naming as insured the persons stipulated in the Contract Data except for items (a) to (e) of the Employer's Risks. The policies shall be issued by insurers and in terms approved by the Employer. The Contractor shall provide the Engineer/Employer with evidence that any required policy is in force and that the premiums have been paid.

### **14.2 Default**

If the Contractor fails to effect or keep in force any of the insurances referred to in the previous Sub-Clause, or fails to provide satisfactory evidence, policies or receipts, the Employer may, without prejudice to any other right or remedy, effect insurance for the cover relevant to such as a default and pay the premiums due and recover the same plus a sum in percentage given in Contract Data from any other amounts due to the Contractor.

## **15. RESOLUTION OF DISPUTES**

### **15.1 Engineer/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 Engineer/Employer, with a copy to the other party. 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 Engineer/Employer shall give notice of his decision to the Employer and 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 and the Employer shall give effect forthwith to every such decision of the Engineer/Employer unless and until the same shall be revised, as hereinafter provided in an arbitral award.

### **15.2 Notice of Dissatisfaction**

If a Party is dissatisfied with the decision of the Engineer/Employer or if no decision is given within the time set out in Sub-Clause 15.1 here above, the Party 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 Parties. If notice of

dissatisfaction is given within the specified time, the decision shall be binding on the Parties who shall give effect to it without delay unless and until the decision of the Engineer/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-G 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.

**Contract Data**  
**Conditions of Contract**

Sr. #	Description	Clause Conditions of Contract	Explanation
1.	Employer's name and address	1.1.3	Mehran University of Engineering & Technology, Jamshoro, Sindh, Pakistan
2.	Contractor's name	1.1.5	Name of the Successful Bidder
3.	Engineer's name and address	1.1.20	Directorate of Works & Strategic Planning
4.	Access to site	2.1	Within five (5) days of signing of Contract
5.	Authorized Person of the Employer	3.1	Engr. Azhar Ali Mughal, I.T. Engineer
6.	Subcontracting	4.3	Subcontracting is not allowed
7.	Amount of Performance Security	4.4	Five (5%) of Contract Amount stated in the Letter of Acceptance.
8.	Validity of Performance Security	4.4	Two (02) Years after issuance of Taking over certificate
9.	Time for issue of Engineer/ Employer's Notice to Commence	7.1	Within 7 days of signing of Contract by the Employer.
10.	Time for Commencement	7.1	From the date as notified in the Engineer / Employer's Notice to Commence.
11.	Time for Completion	7.1	<b>Six (06)</b> months calculated from the commencement date, notified in Engineer/ Employer's Notice to Commence.
12.	Time for furnishing programme	7.2	Within 7 days from the date of receipt of Letter of Acceptance.
13.	Amount of Liquidated Damages	7.4	The rate of the Liquidated Damages (LD) shall be 0.10% of the Contract Amount 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 10% of the Contract Amount stated in Letter of Acceptance.
14.	Taking Over Certificate	8.2	By Parts Certificates may be issued.
15.	Defects Liability Period	8.3	One (01) year calculated from the date of completion of the works certified by the Engineer / Employer.
16.	Remedying Defect Period	9.1	Within fourteen (14) days after notice of defect
17.	Contract Price	11.1	As stated in the Letter of Acceptance
18.	Percent of Retention Money	60.2	10% of the amount of Interim payment certificate
19.	Refund of Retention Money	--	- 50% soon after presenting No Defect Certificate from end-user & remaining 50% After (01) year.
20.	Payment Terms	11.2	(i) <b>Mobilization Advance:</b> (15%) Fifteen percent of the Contract Price. (ii) <b>Delivery of Machinery, Equipment and Material of the System at Site:</b> (50%) Sixty percent of the Contract Price after inspection of material. (iii) <b>Upon Completion of the Project:</b> (35%) Thirty Five percent of the Contract Price after presenting the completion certificate.
21.	Types, amounts & persons named in the insurance.	14.1	The Director (Works & Strategic Planning)

## **FORMS OF BID & APPENDICES TO BID**

## LETTER OF TECHNICAL BID

**Date:** -----

Bid Reference No: \_\_\_\_\_  
(Name of Contract/Works)

To:

\_\_\_\_\_  
\_\_\_\_\_

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with instructions to Bidders (IB) 9;
- (b) We offer to execute and complete in conformity with the Bidding Documents the following works: [●]
- (c) Our Bid Consisting of the Technical Bid and the Bid Price shall be valid for a period of [●] days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (d) As security for due performance of the under takings and obligations of our bid, we submit here with a Bid security, in the amount specified in Bidding Data, which is valid (at least) thirty (30) days beyond validity of Bid itself;
- (e) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process; and
- (f) We agree to permit Employer or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors. This permission is extended for verification of any information provided in our Technical Bid which comprises all documents enclosed herewith in accordance with IB 11.1 of the Bidding Data.

Name\_\_\_\_\_

In the Capacity of\_\_\_\_\_

Signed\_\_\_\_\_

Duly authorized to sign the Bid for and on behalf of:-----

Date:\_\_\_\_\_

Address:\_\_\_\_\_



## LETTER OF FINANCIAL BID

Dated: \_\_\_\_\_

Bid Reference No. \_\_\_\_\_

(Name of Contract/Works)

To,

\_\_\_\_\_  
\_\_\_\_\_

We, the undersigned, declare that:

- a. We have examined and have no reservations to the bidding documents, including Addenda issued in accordance with instructions to Bidders (IB);
- b. The total Kilowatt of Solar Power System is: [●]
- c. Our Bid shall be valid for a period of [●] days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- d. If our Bid is accepted, we commit to obtain and post a performance security in accordance with the Bidding Documents;
- e. We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed and we do hereby declare that the Bid is made without any collusion, comparison of figures or arrangement with any other bidder for the works;
- f. We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive;
- g. We agree to permit Employer or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors. This permission is extended for verification of any information provided in our Technical Bid which comprises all documents enclosed herewith in accordance with IB 11.1 of the Bidding Data; and
- h. If awarded the contract, the person named below shall act as Contractors Representative.

Name: \_\_\_\_\_

In the capacity of: \_\_\_\_\_

Signed: \_\_\_\_\_

Duly authorized to sign the Bid for and on behalf of: \_\_\_\_\_

Date: \_\_\_\_\_

Address: \_\_\_\_\_

### **Appendix-A to Bid PROPOSED CONSTRUCTION SCHEDULE**

[Please note that the Works shall be completed on or before the date stated in the Contract Data. The Bidder shall provide as Appendix-A to Bid, the Construction Schedule in the bar chart showing the sequence of work items and the period of time during which he proposes to complete each work item in such a manner that his proposed programme for completion of the whole of the Works and parts of the Works shall not exceed the time period specified in the Contract Data. Such period shall commence and counted from the date of receipt of Engineer/Employer's Notice to Commence in accordance with the terms and conditions of the Contract Agreement.]



**METHOD OF PERFORMING THE WORKS**

[Please note that the Bidder is required to submit a narrative outlining the method of performing the Works. The narrative should indicate in detail and include but not be limited to:

1. Organization Chart indicating head office and field office personnel involved in management and supervision, Engineering, equipment maintenance and purchasing.
2. Mobilization, the type of facilities including personnel accommodation, office accommodation, provision for maintenance and for storage, communications, security and other services to be used.
3. The method of executing the Works, the procedures for installation of equipment and machinery and transportation of equipment and materials to the site.
4. Quality control / Quality assurance to be adopted including procedures to be followed for carrying out all tests required under specifications.]

**ORGANIZATION CHART  
FOR THE SUPERVISORY STAFF AND LABOUR**

[Please insert the complete details of the supervisory staff who will monitor and ensure the quality installation and commissioning of the System in accordance with the Specifications given under the Bidding Documents.]

**Appendix-E to Bid**

**PAST EXPERIENCE, CURRENT COMMITMENTS, PERSONNEL  
CAPABILITIES AND FINANCIAL STRENGTH**

[Please provide necessary documentary evidence to substantiate the past experience, current commitments, personnel capabilities and financial strength of your Company for evaluation as per the Qualification Criteria given below.]

## Qualification Criteria

1. Qualification evaluation criteria is as follows:

Sr.#	Category	Weightage/Marks
I.	Experience Record	30
II.	Personnel Capabilities	20
III.	Financial Soundness	50
	<b>Total:</b>	<b>100</b>

**Note:** Qualification status shall be decided on the basis of Pass / Fail basis.  
The applicant must secure at least 50% score in each category.

2. The further detailed criteria for each category will be as given under each head as follows:

### I. Experience

Credit Marks for experience shall be awarded based on following qualifications:

Sr. No.	Description	Marks Assigned	Explanation for Marks Obtained
a.	Solar PV Projects completed in last three years.  (Each of min. Rs. 390 million)  No Marks will be awarded for works less than specified limit.	20	15 Marks will be given if the Bidder has completed atleast 5 projects in last three years.  For less than 5 projects completed following weightage shall be used. $=15 \times (A/5)$
b.	Solar PV Projects awarded and are under construction and yet to be commissioned.  (Each of min. Rs. 390 million)  No Marks will be awarded for works less than specified limit.	10	<input type="checkbox"/> Full Marks will be given if the Bidder has maximum of 5 project in-hand.  <input type="checkbox"/> For less than 5 projects in-hand use the following weightage.  $=10 \times (A/5)$  $A = \text{No. of projects in-hand.}$
<b>Total Marks Allowed</b>			<b>30</b>

## II. Personnel Capabilities

Credit Marks shall be awarded under this category using the following criteria:

Sr. No.	Description	Marks Assigned	Explanation for Marks Obtained
a.	Graduate Engineer / Designer	10	<p>Full Marks will be given if at least four B.Sc Engineer (professional) with 5 year or above experience is in employment of the firm.</p> <p><input type="checkbox"/> For engineers having experience less than 5 years but equal or greater than two years:</p> $=2.5 \times (A/5)$ <p>A = No. of years of experience provided A must be equal or greater than two (2) years.</p> <p>Zero (0) Mark will be given in case B.Sc. Engineer is not in employment of the firm or if employed his experience is less than two years.</p>
b.	Diploma Engineer in Employment of the Firm	10	<p><input type="checkbox"/> One Mark will be given for each of the Associate Engineer with at least five years of experience is in employment of the firm.</p> <p><input type="checkbox"/> For experience less than 5 years but equal or greater than two years:</p> $=1 \times (A/5)$ <p>A = No. of years of experience provided A must be equal or greater than two (2).</p> <p><input type="checkbox"/> Zero (0) Mark will be given in case Associate Engineer is not in employment of the firm.</p>
Total Marks Allocated			20

### III. Financial Position

Credit Marks shall be awarded based on the following criteria:

Sr. No.	Description	Marks Assigned	Criteria for Marks Obtained
a.	Working Capital in last 2 years.	40	<p><input type="checkbox"/> 30 Marks will be given if the available average working capital for last two years is equal to 500 Million.</p> <p><input type="checkbox"/> For the capital less than 100 million use following weightage <math>= 30 \times (A/100)</math> A = Average working capital in last two years.</p> <p><input type="checkbox"/> Full Marks will be given in case of limit is more than 100 million.</p>
b.	QMC ISO certified 9001, 14001	10	No points will be given if certificate is not attached and 10 points will be given in case of valid certificate.
Total Marks Allocated			50



## **Appendix-F to Bid**

### **JOINT VENTURE AGREEMENT**

[Please provide certified true copy of Joint Venture (JV) Agreement, if applicable.]

## Appendix-G to Bid

### 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 Number: \_\_\_\_\_

Dated: \_\_\_\_\_

Contract Value: \_\_\_\_\_

Contract Title: **Supplying & Installation of Solar Power System at MUET, Jamshoro.**

-  
[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 or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoP) through any corrupt business practice.

Without limiting the generality of the foregoing [Name of Supplier] represents and warrants that it has fully declared the brokerage, commission, fee 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 consultations 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, representative or warranty.

[Name of Contractor] accepts full responsibility and strict liability for making and false declaration, not making full disclosure, misrepresenting fact 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 right 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 Supplier] 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:\_\_\_\_\_

Name of Contractor: :\_\_\_\_\_

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Seal

Seal

\_\_\_\_\_

## BILL OF QUANTITIES

### A. Preamble

1. The Bill of Quantities shall be read in conjunction with the Conditions of Contract, Specifications and Drawings.
  2. In this bidding process, the focus is on determining the number of kilowatts (KW) that can be delivered within the fixed budget, rather than bidding on the total amount. The budget for this bid has been set at a fixed value, and we invite interested parties to submit proposals specifying the KW capacity achievable within this predetermined budget.
  3. The fixed budget for this assignment in local currency is **Rs. 383.400 Million**, that is inclusive of all the applicable taxes.
  4. The specifications for the equipment and materials to be utilized for this project have been outlined in the tender documents. Therefore, we kindly request all interested parties to submit their bids by meticulously calculating the prices for the specified equipment and materials, while focusing on the KW capacity attainable within the established budget.
  5. The Solar Panels, On-Grid Inverters, AC/DC circuit breakers and MC4 connectors are items that are not manufactured in Pakistan and needs to be imported. The successful bidder will be required to produce the original documents of materials/equipment imported directly or indirectly from outside Pakistan (LC's, Custom Clearance & invoices of purchase from origin country) in paper form.
  6. No Escalation or De-escalation is allowed.
  7. The bidding capacity is locked at the time of opening of bids, and no claim from contractor will be entertained if the prices of items and materials change in the market due to variation Forex rates.
  8. Performance Warranty of Solar Panels required is **25 years**.
  9. Replacement Warranty of equipment required is **02 years**.
  10. On site After Sales maintenance support required is **02 years**.
-

**BILL OF QUANTITIES (SUMMARY)**

S. NO.	DESCRIPTION	QUANTITY	UNIT	AMOUNT (Rs.) in Million	CAPACITY (kW)
01	Supply & Installation of Solar Power System at MUET, Jamshoro	01	Job	383.400	

## LIST OF REQUIRED ITEMS & MATERIALS WITH SPECIFICATIONS AND REQUIREMENTS

S No	Item	Description	Manufacturer
1	Solar Panels 550 W Mono PERC	550 Tier 1 Composition: Monocrystalline /MonoPerc Efficiency: >21.2 % Quality: A++ Certification: ISO9001:2015, ISO14001:2015, ISO45001:2018 IEC61215, IEC61730	JA SOLAR/ LONGI SOLAR/ JINKO SOLAR or equivalent
2	On Grid with WiFi monitoring module	Inverter: MPPT Pure Sine wave 3 Phase Interface:RS232/R485/WiFi/GPRS/USB Efficiency: 97 % or Above Protection Rating: IP 65 Or above	Sungrow/ Huawei or equivalent
3	DC CIRCUIT BREAKER (Two pole 1000 V/ 20 A DC)		CLBE or equivalent
4	AC CIRCUIT BREAKER (50 A) 4 pole (MCB)		Terasaki/Hyundai/ABB or equivalent
5	DC Wire 6mm flexible 1000V Red XLPE/XLPE		United Cables/ Fast Cables/ Asian Cables or equivalent
6	AC Cable 4 core 95mm Standard		Pakistan Cables/ Fast Cables/ Newage or equivalent
7	Earth PIT, 35' deep bore of 6" dia, 10' 16mm copper rod, 25mm copper wire (bare) 30', u clamp, Earthing material 25 kg, 2x2' main hole with metal cap, earth bus bar 12" with insulators. GI pipe 2" 25' with hanging clamps. Less than 1-2 Ohm.		Local
8	Earth Bus Bar 12" with insulators		Local
9	Earth wire green / yellow 6mm standard		Pakistan Cable/ Fast Cables/ United Cables/ Asian Cables or equivalent
10	Earth wire green / yellow 35mm standard		Pakistan Cable/ Fast Cables/ United Cables/ Asian Cables or equivalent
11	Copper lighting arrestor/rod with ball having five spikes and base.		Local

S No	Item	Description	Manufacturer
12	4"x4" pipe-based Parking Shed 12G with 1.5"x3" pipe 16G. 2x2x3' digging, civil work concrete. Solar panel fixation with M8 SS 304 bolt sets. Design, Drawing, Material, Fixation inclusive on Turnkey basis. Painted		Local
13	L3 Aluminum based mountings for Solar panels housing. Standard Aluminum channel with 2.5sq.mm thickness and Stainless Steel 304 Taiwan standard nuts and bolts.		Local
14	L4 Aluminum based mounting for Solar Panels housing having Standard Aluminum channel of 2.5sqmm thickness and stainless steel 304 standard nuts and bolts.		Local
15	MC4 Connectors IP65 Good quality		TUV/ Trina or equivalent
16	Cable Tray with cover, 16G GI 4"x4" for outdoor fixation on walls along with necessary fixation hinges, clamps.		Local
17	PVC Pipe 4" Good Quality 3mm thickness		Local
18	Net Metering Consultancy & Documentation, License, Inspection, and approval by NEPRA		Local
19	Distribution Box (DB) for Breakers for Solar System		Local
21	Integration of Solar Power System with existing infrastructure of Power Systems in the buildings		Local
22	All civil works as per site / design requirement.		Local
23	Testing and Commissioning		Local
26	Two Year On site After Sales support (SLA).		Local

**FORMS**  
**BID SECURITY**  
**PERFORMANCE SECURITY**  
**CONTRACT AGREEMENT**



**BID SECURITY**  
**(Bank Guarantee)**

Security Executed on

\_\_\_\_\_  
(Date)

Name of Surety (Bank) with Address:

\_\_\_\_\_  
(Scheduled Bank in Pakistan)

Name of Principal (Bidder) with Address

\_\_\_\_\_

Security Amount in Rupees. \_\_\_\_\_ (Rs.  
\_\_\_\_\_)

Bid Reference No.

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bid and at the request of the said Principal (Bidder) we, the Surety above named, are held and \_\_\_\_\_ firmly \_\_\_\_\_ bound \_\_\_\_\_ unto

(hereinafter called the 'Employer') in the sum stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Bidder has submitted the accompanying Bid dated \_\_\_\_\_ for Bid No. \_\_\_\_\_ for \_\_\_\_\_ (Particulars of Bid) to the said Employer; and

WHEREAS, the Employer has required as a condition for considering said Bid that the Bidder furnishes a Bid Security in the above said sum from a Scheduled Bank in Pakistan or from a foreign bank duly counter-guaranteed by a Scheduled Bank in Pakistan, to the Employer, conditioned as under:

- (1) that the Bid Security shall remain in force up to and including the date 30 days after the deadline for validity of bids as stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Surety is hereby waived;
- (2) that the Bid Security of unsuccessful Bidders will be returned by the Employer after expiry of its validity or upon signing of the Contract Agreement; and
- (3) that in the event of failure of the successful Bidder to execute the proposed Contract Agreement for such work and furnish the required Performance Security, the entire said sum be paid immediately to the said Employer pursuant to Clause 15.6 of the Instruction to Bidders for the successful Bidder's failure to perform.

NOW THEREFORE, if the successful Bidder shall, within the period specified therefor, on the prescribed form presented to him for signature enter into a Contract

Agreement with the said Employer in accordance with his Bid as accepted and furnish within ten (10) days of issuance of Letter of Acceptance, a Performance Security with good and sufficient surety, as may be required, upon the form prescribed by the said Employer for the faithful performance and proper fulfilment of the said Contract Agreement or in the event of non-withdrawal of the said Bid within the time specified for its validity then this obligation shall be void and of no effect, but otherwise to remain in full force and effect.

PROVIDED THAT the Surety shall forthwith pay the Employer the said sum upon first written demand of the Employer (without cavil or argument) and without requiring the Employer to prove or to show grounds or reasons for such demand, notice of which shall be sent by the Employer by registered post duly addressed to the Surety at its address given above.

PROVIDED ALSO THAT the Employer shall be the sole and final judge for deciding whether the Principal (Bidder) has duly performed his obligations to sign the Contract Agreement and to furnish the requisite Performance Security within the time stated above, or has defaulted in fulfilling said requirements and the Surety shall pay without objection the said sum upon demand from the Employer forthwith and without any reference to the Principal (Bidder) or any other person.

IN WITNESS WHEREOF, the above bounden Surety has executed this Guarantee under its seal on the date indicated above, the name and seal of the Surety being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

SURETY (Bank)

WITNESS:

Signature \_\_\_\_\_

1. \_\_\_\_\_

Name \_\_\_\_\_

\_\_\_\_\_

Title \_\_\_\_\_

Corporate Secretary (Seal)

Corporate Guarantor (Seal)

2. \_\_\_\_\_

\_\_\_\_\_  
Name, Title & Address

**FORM OF PERFORMANCE SECURITY**  
**(Bank Guarantee)**

Guarantee No. \_\_\_\_\_

Executed on \_\_\_\_\_

Expiry date \_\_\_\_\_

[Letter by the Guarantor to the Employer] \_\_\_\_\_

Name of Guarantor (Bank) with address:

\_\_\_\_\_

(Scheduled Bank in Pakistan)

Name of Principal (Contractor) with address:

\_\_\_\_\_

Security Amount (express in words and figures) \_\_\_\_\_

\_\_\_\_\_

Letter of Acceptance No. \_\_\_\_\_ Dated \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bidding Documents and above said Letter of Acceptance (hereinafter called the Documents) and at the request of the said Principal we, the Guarantor above named, are held and firmly and irrevocably and unconditionally bound unto the \_\_\_\_\_ (hereinafter called the Employer) in the sum of the amount stated above for the payment of which sum well and truly to be made to the said Employer, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has accepted the Employer's above said Letter of Acceptance for \_\_\_\_\_ (Name of Contract) for the \_\_\_\_\_

\_\_\_\_\_ (Name of Project).

NOW THEREFORE, if the Principal (Contractor) shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the said Documents during the original terms of the said Documents and any extensions thereof that may be granted by the Employer, with or without notice to the Guarantor, which notice is, hereby, waived and shall also well and truly perform and fulfill all the undertakings, covenants terms and conditions of the Contract Agreement and of any and all modifications of said Documents that may hereafter be made, notice of which modifications to the Guarantor being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue till all requirements of Clause 8.3, Defects Liability, of Conditions of Contract are fulfilled.

Our total liability under this Guarantee is limited to the sum stated above and it is a condition of any liability attaching to us under this Guarantee that the claim for payment in writing shall be received by us within the validity period of this Guarantee, failing which we shall be discharged of our liability, if any, under this Guarantee.

We, \_\_\_\_\_(the Guarantor), waiving all objections and defences under the Contract, do hereby irrevocably and independently guarantee to pay to the Employer without delay upon the Employer's first written demand without cavil or arguments and without requiring the Employer to prove or to show grounds or reasons for such demand any sum or sums up to the amount stated above, against the Employer's written declaration that the Principal has refused or failed to perform the obligations under the Contract Agreement which payment will be effected by the Guarantor to Employer's designated Bank & Account Number.

PROVIDED ALSO THAT the Employer shall be the sole and final judge for deciding whether the Principal (Contractor) has duly performed his obligations under the Contract Agreement or has defaulted in fulfilling said obligations and the Guarantor shall pay without objection any sum or sums up to the amount stated above upon first written demand from the Employer forthwith and without any reference to the Principal or any other person.

IN WITNESS WHEREOF, the above-bounden Guarantor has executed this Guarantee under its seal on the date indicated above, the name and corporate seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Witness:

1. \_\_\_\_\_

\_\_\_\_\_  
Corporate Secretary (Seal)

2. \_\_\_\_\_

\_\_\_\_\_  
Name, Title & Address

\_\_\_\_\_  
Guarantor (Bank)

Signature \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

\_\_\_\_\_  
Corporate Guarantor (Seal)

## FORM OF CONTRACT AGREEMENT

THIS CONTRACT AGREEMENT (hereinafter called the “Contract Agreement”) made on the \_\_\_\_\_ day of \_\_\_\_\_ (month) 20\_\_\_\_ between \_\_\_\_\_ (hereafter called the “Employer”) of the one part and \_\_\_\_\_ (hereafter called the “Contractor”) of the other part.

WHEREAS the Employer is desirous that certain Works, viz \_\_\_\_\_ should be executed by the Contractor and has accepted a Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW this Agreement witnesseth as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents after incorporating addenda, if any, except those parts relating to Instructions to Bidders shall be deemed to form and be read and construed as part of this Contract Agreement, viz:
  - (a) The Letter of Acceptance;
  - (b) The Financial Bid Letter, Technical Bid Letter and Appendices;
  - (c) Conditions of Contract;
  - (d) Contract Data;
  - (e) The Drawings and Design of the System;
  - (f) The Scope of Work and System Design Specifications.
  - (g) \_\_\_\_\_ (any other)
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy defects therein in conformity and in all respects with the provisions of this Contract Agreement.
4. The Employer hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works as per provisions of this Contract Agreement, the Contract Price or such other sum as may become payable under the provisions of this Contract Agreement at the times and in the manner prescribed therein.

IN WITNESS WHEREOF the parties hereto have caused this Contract Agreement to be executed on the day, month and year first before written in accordance with their respective laws.

Signature of the Contactor

\_\_\_\_\_  
(Seal)

Signature of Employer

\_\_\_\_\_  
(Seal)

In the presence of:

Witness:

\_\_\_\_\_  
(Name, Title and Address)

Witness:

\_\_\_\_\_  
(Name, Title and Address)

# **SCOPE OF WORKS & SYSTEM DESIGN SPECIFICATIONS**

# SCOPE OF WORKS & SYSTEM DESIGN SPECIFICATIONS

## SCOPE OF WORK

### **1. Preparation of Design / Drawings, Quality Assurance/Post Shipment Inspection:**

The initial phase of the project mandates a comprehensive site visit to the university campus. During this visit, meticulous calculations of the electrical load within the designated buildings are to be carried out. Furthermore, a rigorous inspection of the rooftops of these buildings is essential to assess their suitability for the installation of a solar power system.

The contractor is entrusted with the task of preparing detailed design and drawings for the solar power system. These designs must take into account the identified electrical load requirements, as well as the precise mounting structures necessary for the solar panels.

### **2. Engineering:**

The contractor is expected to engage in the engineering phase, where the development of sophisticated engineering solutions is paramount to facilitate the seamless integration of the solar power system with the existing power infrastructure of the buildings.

### **3. Procurement:**

The procurement phase necessitates the efficient sourcing and acquisition of all required equipment, materials, and components essential for the successful execution of the solar power system installation. This includes the careful procurement of quality solar panels, mounting structures, and other vital components.

### **4. Construction:**

The construction phase entails the physical installation of the solar power system on the designated rooftops, encompassing the intricate task of integrating it with the existing building power infrastructure. The contractor must ensure that all construction activities strictly adhere to industry standards, safety protocols, and the precise design requirements.

### **5. Operations & Maintenance:**

Beyond the installation phase, the contractor assumes the responsibility of overseeing the operation and maintenance of the solar power system. This entails ongoing monitoring, proactive troubleshooting, and the implementation of preventive maintenance measures to ensure the uninterrupted and efficient operation of the system.

The contractor's meticulous execution of these project phases is pivotal to the overall success of the solar power system installation within the university campus. It is imperative that the contractor upholds the highest standards of quality, safety, and precision throughout the entire project lifecycle.



- A. Warrantee and Defect Liability Period will include rectification /replacement of all the defective and consumable components/items. However, all the non-functional parts / materials / items replaced during the Warrantee and Defect Liability Period shall be the property of the Contractor.
- B. After commissioning of the System, the Contractor will conduct on-site training of the purchaser's/ user's personnel regarding assembly, start-up, operation, maintenance and repairs of the System.
- C. During Defect Liability Period, the Contractor will have to make all necessary arrangements including training of the Employer manpower at site for satisfactory operation, maintenance and performance of the System.
- D. Rectification of all the defects developed in the System during Warrantee and Defect Liability Period shall have to be done by the Contractor promptly, at the most within seven (7) days from the date of receipt of complaint.
- E. During Defect Liability Period, the Contractor shall have to submit annual performance & functionality report based on the collected data. The Employer will share the data with the contractor in this regard.
- F. During the Warrantee and Defect Liability Period, the Employer will have all the rights to cross check the performance of the System. The Employer may randomly pick up its components to get them tested at accredited labs or any government approved test center. If during such tests any part is not found as per the specified technical parameters, the Employer will take the necessary action to recover the losses and to black list the firm and the same may be communicated to AEDB and other nodal agencies. The decision of the Employer in this regard will be final and binding on the Contractor.

### **List of Proposed Buildings for Installation of Solar Power**

- 1. Main Administration Building
- 2. Department of Civil Engineering
- 3. Department of Electrical Engineering
- 4. Department of Mechanical Engineering
- 5. Department of City & Regional Planning
- 6. Department of Architecture
- 7. Gymnasium & Sports Complex
- 8. Research & Development Centre – I
- 9. Research & Development Centre - II
- 10. Department of Software Engineering
- 11. Department of Computer System Engineering
- 12. Institute of Information Technology
- 13. Institute of Communication Technologies
- 14. Department of Electronics Engineering
- 15. Institute of Communication & Processing Centre
- 16. Science & Technology Park Building
- 17. Pumping Station @ K.B Feeder