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PAKISTAN RAILWAYS HEADQUARTERS OFFICE, LAHORE

BIDDING DOCUMENTS

(Single Stage - Two Envelope Bidding Procedure)

for

SOLARIZATION OF PAKISTAN RAILWAYS BUILDINGS ON LEASE PURCHASE AGREEMENT (BOOT MODEL) – PHASE 1

for

LOT-1 [PESHAWAR DIVISION]

LOT-2 [RAWALPINDI DIVISION]

LOT-3 [LAHORE DIVISION]

LOT-4 [MULTAN DIVISION]

LOT-5 [SUKKUR DIVISION]

LOT-6 [QUETTA DIVISION]

LOT-7 [KARACHI DIVISION]

Bid Reference No. Elect/03/Solar/BOOT/2024

OFFICE OF THE CHIEF ELECTRICAL ENGINEER PAKISTAN RAILWAYS, HEADQUARTERS OFFICE, LAHORE

Table of Contents

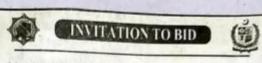
invi		DIQ	
A.	GENE	RAL	
	IB.1	Scope of Bid	6
	IB.2	Source of Funds	6
	IB.4	One Bid per Bidder	6
	IB.5	Cost of Bidding	7
	IB.6	Site Visit	7
B.	BIDDI	NG DOCUMENTS	7
	IB.7	Contents of Bidding Documents	7
	IB.8	Clarification of Bidding Documents	
	IB.9	Amendment of Bidding Documents	8
C.	PREPA	ARATION OF BIDS	8
	IB.10	Language of Bid	8
	IB.11	Documents Comprising the Bid	8
	IB.12	Bid Price	9
	IB.13	Currencies of Bid and Payment	10
	IB.14	Bid Validity	10
	IB.15	Bid Security.	10
	IB.16	Alternate Proposals by Bidder	11
	IB.17	Pre-Bid Meeting	11
	IB.18	Format and Signing of Bid	11
D.	SUBM	ISSION OF BIDS	12
	IB.19	Sealing and Marking of Bids	
	IB.20	Deadline for Submission of Bids	13
	IB.21	Late Bids	13
	IB.22	Modification, Substitution and Withdrawal of Bids	13
E.		PENING AND EVALUATION FOR SINGLE STAGE TWO ENVELOPE	
		Bid Opening	
	IB.23 IB.24		14
	IB.24 IB.25		
	IB.25	Clarification of Bids Examination of Bids and Determination of Responsiveness	
	IB.27	Correction of Errors	
	IB.27	Evaluation and Comparison of Bids	
F.		•	
F.		RD OF CONTRACT	
	ÍB.29	Award	
		ocuring Agency's Right to Accept any Bid and to Reject any or all Bids	
		otification of Award	
		erformance Security	
		igning of Contract Agreement	
		eneral Performance of the Bidders	
		ntegrity Pact	
		nstructions not Part of Contract Agreement	
	IB.37 St	ufficiency of Bid	19

IB.38 Contractor/Sub-Contractors	19
IB.39 Taxes & Duties	19
IB.40 Insurance	19
BIDDING DATA	21
QUALIFICATION CRITERIA	24
QUALIFICATION CRITERIA	25
BIDDER'S QUALIFICATION FORMS	27
BIDDER'S QUALIFICATION FORMS	28
LETTER OF TECHNICAL BID	
LETTER OF PRICE BID	
PROPOSED CONSTRUCTION SCHEDULE	
METHOD OF PERFORMING THE PROJECT	
LIST OF CONTRACTORS/SUB-CONTRACTORS	40
ORGANIZATION CHART	
JOINT VENTURE AGREEMENT/LETTER OF INTENT	
INTEGRITY PACT	
SCHEDULE OF PRICES	
FORM OF PERFORMANCE SECURITY	67
FORM OF BANK GUARANTEE	
FORM OF CONTRACT AGREEMENT	
FORM OF EASEMENT AGREEMENT	
CONDITIONS OF CONTRACT	
Basic Terms and Conditions	
General Terms and Conditions	
Contract Data	95



Invitation to Bid

Roznama Nai Baat dated April 19, 2024:



SOLARIZATION OF PAKISTAN RAILWAYS BUILDINGS ON LEASE PURCHASE AGREEMENT (BOOT MODEL)-PHASE 1

- Pakistan Railways, Railways' Headquarter Office, Empress Road, Lahore (the "Procuring Agency") invites sealed Bids under
 Rule
 No. 36 (b) of Public Procurement Rules 2004, from the eligible
- Bidders, registered with Income Tax Department and who are on Active Taxpayers List of the Federal Board of Revenue for Solarization of Pakistan Railways Buildings on Lease Purchase Agreement (BOOT Model) Phase 1 for its various Divisions under Seven (07) Lots, Peshawar, Rawaipindi, Lahore, Multan, Sukkur, Quetta and Karachi Divisions. The Bidder(s) may submit Bid(s) for one or multiple Lots.
- Bidding Documents, containing detailed terms and conditions, etc. are available at below mentioned office. Price of the Bidding Documents is Rs. 5,000.
- Pre Bid meeting will be held on 02-05-2024 in the committee room No. 1, Pakistan Railways Headquarter Office, Lahore at 11:00 hrs PST.
- 4. The Bids (Technical and Financial Bids), prepared in accordance with the instructions in the Bidding Documents, must reach at address given below on or before 22-05-2024 (Wednesday) upto 11:00 hrs. Technical Bids will be opened on the same day at 11:30 hrs. This advertisement and Bidding Documents are also available on PPRA website at www.ppra.org.pk and Pakistan Railways website www.pakrail.gov.pk.

Chief Electrical Engineer

Pakistan Railways Headquarter Office,
Empress Road, Lahore
Phone/Fax Number: 042-99201690, 99201803
E-mail; cee@pakrail.gov.pk
Website: http://www.pakrail.gov.pk



INSTRUCTIONS TO BIDDERS

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

A. GENERAL

IB.1 Scope of Bid

- 1.1 The Procuring Agency (as defined in the Bidding Data) (also reffered to as Lessee in the Conditions of Contract) wishes to receive Bids for the project as described in these Bidding Documents, and summarized in the Bidding Data hereinafter referred to as the "**Project**".
- 1.2 The successful Bidder (also reffered to as Lessor in the Conditions of Contract) will be expected to complete the Project within the time specified in Contract Data of Conditions of Contract.

IB.2 Source of Funds

2.1 The Successful Bidder shall be solely responsible for arrangement of all funds required for the design, installation, testing, commissionoing, operation and maintenance of the Systems during the Term (as more specifically described in the Conditions of Contract).

IB.3 Eligible Bidders

- 3.1 This Invitation to Bid is open to all Pakistani and foreign Bidders meeting the following requirements:
 - (a) Pakistani Bidder (single entity or each JV Partner) shall be registered with Income Tax Department and must be on Active Taxpayer List of the Federal Board of Revenue (FBR) at the time of submission of its Bid.
 - (b) Foreign JV Partner(s) shall be registered with Securities Exchange Commission of Pakistan (SECP) at the time of submission of its Bid. However, if foreign JV Partner(s) is not registered with SECP at the time of submission of its Bid, it will be required to get registered itself with SECP before award of the Contract and to submit a declaration on stamp paper in this regard with its Bid.
 - (c) The Bidder (single entity, each JV partner or its Contractor/Sub-Contractor) shall not be eligible to participate in this Bidding process while under temporary suspension or debarment/blacklisting by any Procuring Agency, Government/Semi Government/Public Departments of Islamic Republic of Pakistan, a foreign country, international organization or other foreign institutions.

IB.4 One Bid per Bidder

4.1 Each Bidder shall submit only one bid either by itself, 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 Procuring Agency 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 on their own expense and without any liability to the Procuring Agency are advised to visit and examine the Site(s) of the Project and obtain all information that may be necessary for preparing the Bid and for the design and installation of the System at each Site.
- 6.2 The Bidders and any of their personnel or agents will be granted permission by the Procuring Agency 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 Procuring Agency, 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 to Bid, 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. Qualification Criteria
 - 4. Bidder's Qualification Forms
 - 5. Letters of Bid and Appendices to Bid
 - 6. Forms
 - 7. Technical Design Specifications and Data
- 7.2 The Bidders are expected to examine carefully the contents of all the above 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 Procuring Agency in writing and the Procureing Agency will promptly respond to such request (with copy to all purchasers of Bidding Documents) but no later than five (05) Days prior to the deadline for submission of Bids.
- 8.2 Copies of the Procuring Agency'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 Procuring Agency 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 Procuring Agency.
- 9.3 To afford prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Procuring Agency 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 or annexed to the Bid exchanged by a Bidder and the Procuring Agency shall be in the language as stipulated in the Bidding Data. 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 Price Bid, containing the documents listed in Bidding Dataunder 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 shall be specified in such agreement. Bids submitted by a JV of two (2) or more partners shall comply with the following requirements:
 - 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 seven (7) days of the receipt of Letter of Acceptance failing which the Letter of Acceptance shall stand void and redundant.
 - b. One of the JV partners shall be nominated as being in charge/principal 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 of resolution to this effect or any authorization required under the

- law shall be mandatory.
- regarding all matters related with and/or incidental to the execution of the Project 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 Agreement and a statement to this effect shall be included in the authorization mentioned under Sub-Para (b) above as well as in the JV Agreement (in case of a successful Bid); and
- e. A copy of JV Agreement shall be submitted before signing of the Contract Agreement, 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 Agreement 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 Agreement. No amendments/modifications whatsoever in the JV Agreement shall be agreed to between the JV partners without prior written consent of the Procuring Agency.
- 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 Project requirements and the completion time referred to in Sub-Clause 1.2 hereof.

IB.12 Bid Price

- 12.1 Unless stated otherwise in the Bidding Documents, the Contract shall be for a whole Lot included in the Project as described in Sub-Clause 1.1 hereof, based on the rates / prices submitted by the Bidder.
- 12.2 The Bidders shall fill in the Guaranteed Annual Energy Yield (GAEY) and the Annual Lease Rental (ALR) for all Sites included in a Lot, as described in the Schedule of Prices. The Bidders shall also fill in the Average Unit Price by computing the same in accordance with the formula stated in the Schedule of Prices.
- All duties, taxes and other levies payable by the Successful Bidder under the Contract Agreement, or for any other cause, shall be included in the unit rates and prices submitted by a Bidder. After the Commercial Operation Date, any additional / reduced indirect taxes due to subsequent additions or changes in legislation shall be reimbursed / deducted as per terms of the Contract Agreement.
- 12.4 The payable Annual Lease Rentals are subject to downward adjustment during the performance of the Contract Agreement for each individual Site if it is found that the System does not produce Guaranteed Annual Energy Yield as per terms of the Contract Agreement for that specific Site.

IB.13 Currencies of Bid and Payment

13.1 The unit rates and the prices shall be quoted by the Bidder entirely in Pak Rupees and the currency of payment to the Successful Bidder shall also be 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 Procuring Agency 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 Demad Draft, Call Deposit Receipt or a 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 FA & CAO/PR Headquarters Office, Lahore on the prescribed Form annexed to the Bidding Documents valid for a period sixty (60) days beyond the Bid Validity date. The Bid Security of Joint Venture shall be in the name of Joint Venture or Partner-In-Charge, submitting the Bid.
 - For avoidance of doubt, a Bid Security issued by a foregin bank but not counter guaranteed by a Scheduled Bank in Pakistan shall not be acceptable and shall render the Bid non-responsive and recjected.
- 15.3 Any Bid not accompanied by an acceptable Bid Security shall be rejected by the Procuring Agency 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 upon the execution of the Contract Agreement.
- 15.6 The Bid Security may be forfeited:
 - a. if the Bidder withdraws his Bid except as provided in Clause 22;
 - b. if the Bidder does not accept the correction 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;
 - ii. sign the Contract Agreement; or

- iii. Furnish the required JV agreement within seven (07) days of the receipt of Letter of Acceptance.
- 15.7 At the end of evaluation of the Technical Bids, the Procuring Agency will return Bid Securties of the Bidders alongwith Price Bids, whose Technical Bids have been declared non-responsive to the requirements of the Bidding Documents.
- 15.8 In case of annulment, Bid Securties and Price Bids, if not yet opened, shall be returned to the Bidders as promptly as possible but not later than thirty (30) days after the annulment.

IB.16 Alternate Proposals by Bidder

- 16.1 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 its 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.
- 16.2 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

- 17.1 The Procuring Agency 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.
- 17.2 The Bidders are requested to submit questions, if any, in writing so as to reach the Procuring Agency not later than seven (7) days before the proposed pre-bid meeting.
- 17.3 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 Procuring Agency exclusively through the issue of an Addendum pursuant to Clause IB.9 and not through the minutes of the pre-bid meeting.
- 17.4 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 Letters of Bid shall be for performing the Contract Agreement 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 Letters 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 the Bid by filling out the forms completely and without alterations one (1) original and two (02) copies 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. Once submitted, no Bid shall be allowed to be altered except when it is permitted by the Procuring Agency for correction of errors or omissions.
- 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 Procuring Agency, 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 Letters 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 Agreement 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 for each Lot shall be separately sealed and put in separate envelopes and marked as such.
 - b. The envelopes containing the ORIGINAL and COPY for each Lot 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 envelops in accordance with 11.1.
- 19.2 The inner and outer envelopes shall:
 - a. be addressed to the Procuring Agency at the address provided in the Bidding Data;
 - b. bear the name and identification number of the contract/Lot as defined in the Bidding Data, and description of the Lot for which Bid is being submitted; 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 Procuring Agency will assume no responsibility for the misplacement or premature opening of the Bid.

IB.20 Deadline for Submission of Bids

- 20.1 (a) Bids must be received by the Procuring Agency at the address specified no later than the time and date stipulated in the Bidding Data or such extended deadline as the Procuring Agency 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.
- 20.2 The Procuring Agency 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 Procuring Agency and the Bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

IB.21 Late Bids

21.1 Any Bid received by the Procuring Agency after the deadline for submission of Bids prescribed in Clause IB.20 will be returned unopened to such Bidder. 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.22 Modification, Substitution and Withdrawal of Bids

- 22.1 Any Bidder may modify, substitute or withdraw its Bid after Bid submission provided that the modification, substitution or written notice of withdrawal is received by the Procuring Agency prior to the deadline for submission of Bids.
- 22.2 The modification, substitution, or notice for withdrawal of any Bid shall be prepared, sealed, marked and delivered in accordance with the provisions of Clause IB.19 with the outer and

- inner envelopes additionally marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" as appropriate.
- 22.3 No Bid may be modified by a Bidder after the deadline for submission of Bids except in accordance with Sub-Clauses 22.1 and 27.2.
- 22.4 Withdrawal of a Bid during the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified in the Letter of Technical Bid may result in forfeiture of the Bid Security in pursuance to Clause IB.15.

E. BID OPENING AND EVALUATION FOR SINGLE STAGE TWO ENVELOPE BIDDING PROCEDURE

IB.23 Bid Opening

- 23.1 The Procuring Agency will open the Technical Bids for each Lot in public at the address, date and time specified in the Bidding Data in the presence of Bidders' designated representatives and anyone who choose to attend. The Price Bids will remain unopened and will be held in custody of the Procuring Agency until the specified time of their opening. The Bidder's representatives who are present shall sign a register evidencing their attendance.
- 23.2 First, envelopes marked "WITHDRAWLS" shall be opened and read out and the envelope with the corresponding Bid shall not be opened, but returned to the Bidder. No Bid withdrawals shall be permitted unless the corresponding Withdrawal Notice contains a valid authorization to request the withdrawal and is read out at bid opening.
- 23.3 Second, outer envelopes marked "SUBSITUTION" shall be opened. The inner envelopes containing the substitution Technical Bid and/or Substitution Price Bid shall be exchanged for the corresponding envelopes being substituted, which are to be returned to the Bidder unopened. Only the Substitution Technical Bid, if any, shall be opened, read out, and recorded. Substitution Price Bid will remain unopened in accordance with IB 23.1. No envelope shall be substituted unless the corresponding Substitution Notice contains a valid authorization to request the substitution and is recorded at Bid opening.
- 23.4 Next, outer envelopes marked "MODIFICATION" shall be opened. No Technical Bid and /or Price Bid shall be modified unless the corresponding Modification Notice contains a valid authorization to request the modification and is read out and recorded at the opening of Technical Bids. Only the Technical Bids, both Original as well as Modification, are to be opened, readout, and recorded in accordance with IB 23.1. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidders signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.
- 23.5 All other envelopes holding the Technical Bids shall be opened one at a time, and the following read out and recorded:
 - (a) the name of the Bidder;
 - (b) whether there is a modification or substitution;

- (c) presence of Bid Security; and
- (d) any other details as the Procuring Agency may consider appropriate.

Only Technical Bids read out and recorded at Bid opening shall be considered for evaluation. The Letter of Technical Bid shall be initialled by the nominated representatives of the Procuring Agency attending the Bid opening. No Bid shall be rejected at the opening of Technical Bids except for late Bids, in accordance with Sub-Clause IB.21.1.

- 23.6 The Procuring Agency shall prepare a record of the opening of Technical Bids that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification.
- 23.7 At the end of the evaluation of the Technical Bids, the Procuring Agency will invite Bidders whose Technical Bids have been declared substantially responsive, to attend the opening of the Price Bids. The date, time, and location of the opening of Price Bids will be advised in writing by the Procuring Agency. Bidders shall be given reasonable notice of the opening of Price Bids.
- 23.8 The Procuring Agency will notify Bidders in writing who have been rejected on the grounds of their Technical Bids being substantially non-responsive to the requirements of the Bidding Documents and return their Price Bids unopened.
- 23.9 The Procuring Agency shall conduct the opening of Price Bids of all Bidders whose Technical Bids were declared substantially responsive, in the presence of Bidders' representatives who choose to attend at the address, date and time specified by the Procuring Agency. The Bidder's representatives who are present shall sign a register evidencing their attendance.
- 23.10 All envelopes containing Price Bids for each Lot shall be opened one at a time and the following read out and recorded:
 - (a) the name of the Bidder;
 - (b) whether there is a modification or substitution;
 - (c) the Bid Prices, including any discounts; and
 - (d) any other details as the Procuring Agency may consider appropriate.

Only Price Bids and discounts read out and recorded during the opening of Price Bids shall be considered for evaluation. The Letter of Price Bid and Schedule of Prices shall be initialled by the nominated representatives of the Procuring Agency attending the Bid opening. No Bid shall be rejected at the opening of Price Bids.

23.11 The Procuring Agency shall prepare a record of the opening of Price Bids that shall include, as a minimum: the name of the Bidder, the Bid Price and any discounts

IB.24 Process to be Confidential

24.1 Subject to Clause 25 heretoafter, no Bidder shall contact the Procuring Agency on any matter relating to its Bid from the time of the Bid opening to the time the Technical/ Price Bid

- evaluation result is announced by the Procuring Agency. The final evaluation result shall be announced at least fifteen (15) days prior to award of Contract.
- 24.2 Any effort by a Bidder to influence the Procuring Agency in the Bid evaluation, Bid comparison or Contract Award decisions may result in the rejection of his Bid. Whereas any Bidder feeling aggrieved may lodge a written complaint not later than seven (07) days of announcement of Technical evaluation results and five (05) days after the announcement of the final Bid evaluation result.

F. AWARD OF CONTRACT

IB.25 Clarification of Bids

- 25.1 The Procuring Agency may, at his discretion, ask any Bidder for clarification of its Bid. 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 Procuring Agency 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 Procuring Agency'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 Procuring Agency 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 Project; (ii) which limits in any substantial way, inconsistent with the Bidding Documents, the Procuring Agency's rights or the Bidder's obligations under the Contract Agreement; 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 Procuring Agency, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation. The Procuring Agency 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 Procuring Ageny for any arithmetic errors. Errors will be corrected by the Procuring Agency as follow:

- (a) whereby if there is a discrepancy between amount in figures and in words, the amount in words will govern;
- (b) where there is a discripency between the Guaranteed Annual Energy Yield values quoted in the Technical Bid and the Price Bid, the values stated in the Technical Bid shall govern.
- (c) where there is a discripency between the unit rates / quantities and line item total resulting from addition of those unit rates / quantities, the unit rates / quantities as quoted will govern, unless in opinion of the Procuring Agency there is an obviously gross misplacement of the decimal, if any, in the unit rates / quantities, in which case the line item total as quoted will govern and the unit rates / quantities will be corrected.
- (d) where there is a discripency between the Average Unit Rate quoted by the Bidder and the Average Unit Rate calculated based on the Guaranteed Annual Energy Yield and the Annual Lease Rental quoted by the Bidder, the calculated value shall govern.
- 27.2 The Guarantted Annual Energy Yield for each Site, the Annual Lease Rental, and the Average Unit Rate stated in the Letter of Price Bid and / or Schedule of Prices corrected by the Procuring Agency in accordance with the above procedure for the correction of errors and with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept any of the the corrections, 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 Procuring Agency will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause IB 26.

F. AWARD OF CONTRACT

IB.29 Award

- 29.1 Subject to Clauses IB.30 and IB.34, the Procuring Agency will award the Lot to the Bidder whose Bid has been determined to be substantially responsive to the Bidding Documents and who has offered the most advantageous Bid having the lowest Average Unit Rate for that Lot, provided that such Bidder has been determined to be eligible in accordance with the provisions of Clause IB.3 and qualified pursuant to criteria provided in the Bidding Documents.
- 29.2 The Procuring Agency, at any stage of the Bid evaluation, having credible reasons for or prima facie evidence of any defect in Bidder's or its Contractor/Sub-Contractor's capacities, may require the Bidder or its Sub-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.30Procuring Agency's Right to Accept any Bid and to Reject any or all Bids

30.1 Notwithstanding Clause IB.29, the Procuring Agency reserves the right 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 or obligation. Rejection of all Bids shall be notified to all Bidders promptly.

IB.31Notification of Award

- 31.1 Prior to expiration of the period of Bid validity prescribed by the Procuring Agency, the Procuring Agency will notify the Successful Bidder in writing ("Letter of Acceptance") that his Bid has been accepted. This letter shall name the sum which the Procuring Agency will pay to the Successful Bidder as per the terms and conditions of the Contract Agreement and details of accepted Guranteed Annual Energy Yield and Annual Lease Rental amount for each Site included in the Lot. The accepted Annual Lease Rental for the awarded Lot shall be subject to adjustment to account for fluctuations in the Consumer Price Index (General), as specified in the Contract Agreement.
- 31.2 No Negotiation with the Successful Bidder 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 Procuring Agency and the Bidder till signing of the formal Contract Agreement.
- 31.4 Upon furnishing by the Successful Bidder of a Performance Security and signing of the Contract Agreement, the Procuring Agency 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 Procuring Agency a Performance Security in the form provided in the Bidding Documents and the amount stipulated in the Conditions of Contract within a period of fifteen (15) 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

Within fourteen (14) days from the date of furnishing of acceptable Performance Security under the Conditions of Contract, the successful Bidder shall depute his representative duly authorized for formal signing of Contract Agreement, form for which is provided in the Bidding Documents.

IB.34 General Performance of the Bidders

34.1 During Bid evaluation, the Procuring Agency reserves the right to obtain information regarding performance of the Bidders on their previously awarded contracts/works. The Procuring Agency 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

IB.35 Integrity Pact

35.1 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 Pak Rupees ten million. Failure to provide such Integrity Pact shall make the Bidder non-responsive.

IB.36 Instructions not Part of Contract Agreement

36.1 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 Agreement.

IB.37 Sufficiency of Bid

37.1 Each Bidder shall be deemed to have satisfied fully, before submitting the Bid, as to all aspects of the Project, correctness and sufficiency of his Bid. Objections, excuses or claims made by the Bidder after submission of his Bid to the Procuring Agency shall not be entertained.

IB.38 Contractor/Sub-Contractors

38.1 A Bidder may subject to terms of the Contract Agreement appoint Contractor/Sub-Contractor and the Sub-Contract shall be subject to the same term and conditions of Contract Agreement.

Overall responsibility of the entire Project, whether parts of it subcontracted or not, shall rest with the Bidder.

IB.39 Taxes & Duties

39.1 The Bidder shall obtain all information as to Pakistan Income Tax, Sales Tax, Salaries Tax, Professional Tax, Company Tax, Municipal Octroi, Levies 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 quoted Annual Lease Rental for the Project. The quoted Annual Lease Rental for the Project shall also include the cost of accepting the general risks/liabilities and obligations set forth or implied in the Contract Agreement.

IB.40 Insurance

40.1 The Bidder shall estimate the amounts required to be provided for all the insurances under the Contract Agreement from insurers, and the Bid Price shall be deemed to include all such amounts.



BIDDING DATA

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

Sr. No.	Reference to Instruction to Bidders	Bidding Data
1	IB-1 1.1	Name and Address of Procuring Agency Pakistan Railways, Railways' Headquarter Office, Empress Road, Lahore
2	1.1	"Design, finance, supply, install, test, commission, own, operate, maintain, and at the end of the Term, transfer the Systems to Pakistan Railways on Lease Purchase Agreement (BOOT Model). The Project has been divided into following Seven (07) lots (invidually referred to as the "Lot" and collectively as the "Lots"): Lot-1 [Peshawar Division] Lot-2 [Rawalpindi Division] Lot-3 [Lahore Division] Lot-5 [Sukkur Division] Lot-6 [Quetta Division] Each Lot contains multiple stations / locations as mentioned in Appendix E to the Bid. Each station / location included in the Lots is referred to as the "Site" and collectively as the "Sites". The On-Grid / Hybrid Solar PV System to be installed at each Site is individually referred to as the "System" and collectively as the "Systems". The Bidders may submit Bids for one or multiple Lots. Evaluation and award shall be on Lot basis. In case if multiple Lots are awarded to the same Bidder, the Bidder shall be required to deploy and maintain separate resources for each awarded Lot. Following new Sub-Clauses are added:
3	IB-4	 "4.2 Two or more Bidders partially or wholly owened or directed by common individuals, regardless of extent of their shares or intrest shall not be eligible to Bid. Either only one such Bidder may Bid or such Bidders may form a joint venture to Bid as one venture. 4.3 A Bidder or its affiliated entity shall not be part of the Procuring

		Agency or participated as a consutant in prepration of design/technical specifications of the Project that are subject of this bidding process.	
4	IB-10	Bid Language:	
4	10.1	English	
		11.1 (A) Technical Bid	
		The Bidder shall submit with its Technical Bid the following documents	
		for each Lot:	
		(a) Letter of Technical Bid;	
		(b) Bid Security (IB.15); (c) Written confirmation outhorizing the signature of the Bid to	
		(c) Written confirmation authorizing the signatory of the Bid to commit the Bidder (IB.18.5);	
		(d) Pending litigation information, if any, that may have impact on	
		the Bid or Bidding process,	
		(e) Proof of purchase of the Bidding Documents directly from the	
		Procuring Agency; (f) Other documents required to be submitted as stated in	
		Eligibility and Qualifification Creteria and Bidder's	
		Qualification Forms;	
		(g) Proposed Construction Schedule (Appendix-A);	
5	IB-11	(h) Method of Performing the Project (Appendix-B);	
3	10-11	(i) List of Contractors/Sub-Contractors (Appendix-C);	
		(j) Organization Chart (Appendix-D);(k) Technical Design Specifications and Data (Appendix-E);	
		(I) Joint Venture Agreement/Letter of Intent (Appendix-F);	
		(m) Integrity Pact (Appendix-G);	
		(n) Any other documents required to be submitted with Technical	
		Bid in accordance with these Bidding Documents.	
		The Bidder shall submit sufficient details to demonstrate the adequacy of the Bid in meeting requirements for timely completion of the	
		Project.	
		11.1 (B) Price Bid	
	•	The Bidder shall submit with its Price Bid the following documents for	
		each Lot:	
		(a) Letter of Price Bid(b) Duly filled in Schedule of Prices (Appendix-H)	
		(b) Duly filled in Schedule of Prices (Appendix-H) (c) Any other documents required to be submitted with Technical	
		Bid in accordance with these Bidding Documents.	
		The following paragraphs are added at the end of Sub-Clause IB. 11.2;	
6	IB-11.2	(f) Number of JV Partners shall not be more than than four (04).	
6	1D-11.2	(g) The Partner-in-Charge in JV shall have at least 40% share. A	
		foreign parntner is entitled to participate in the Bidding only in a	
		JV with a Pakistani partner(s) with share of Pakistani partner(s)	

		not less than 30%.
7	IB-14 14.1	Bid Validity Period of Bid Validity is one hundred twenty (120) days after the date of
		Bid Opening. Amount of Bid Security
		All Bids must be accompanied by a Bid Security for the respective Lot(s) as per following:
8	IB-15 15.1	Lot-1 Bid Security = PKR 1.5 million Lot-2 Bid Security = PKR 3.5 million Lot-3 Bid Security = PKR 14 million Lot-4 Bid Security = PKR 02 million Lot-5 Bid Security = PKR 08 million Lot-6 Bid Security = PKR 1.2 million Lot-7 Bid Security = PKR 07 million
9	IB-17 17.1	Pre-Bid Meeting The pre-bid meeting will be held on date, time and venue notified in Invitation to Bid.
10	IB-19 19.2 (a)	Procuring Agency address for the purpose of Bid submission: Chief Electrical Engineer, Pakistan Railways Headquarter Office, Empress Road, Lahore
11	IB-20 20.1	Deadline for Submission of Bids: As notified in Invitation to Bid
12	IB-28 28.1	Evaluation and Comparison of Bids: Evaluation and award shall be on Lot basis.

QUALIFICATION CRITERIA

QUALIFICATION CRITERIA

The Procuring Agency shall use this Qualification Criteria to evaluate the Bids and qualify the Bidders in accordance with Clause IB.26 of Instructions to Bidders. The Bidder shall provide all the information requested in the Qualification Criteria and in the relevant form contained in Bidder's Qualification Forms provided hereof.

The information provided by the Bidders in the forms shall be substantiated with valid documentary evidences otherwise the requirement will not be considered as complied.

Award Criteria in case of Multiple Lots:

Bidders have the option to Bid for any one or multiple Lots. Bids will be evaluated on a Lot-by-Lot basis. The contract will be awarded to the Bidder offering the lowest evaluated cost in the respective Lot, provided that the Bidder meets the required qualification criteria for that specific Lot.

In case a Bidder offers lowest evaluated cost for multiple Lots, the Qualification Criteria for awarding multiple Lots shall be based on aggregate (cumulative) requirement of financial position criteria for the respective Lots, as specified hereunder.

1. Mandatory Requirement

The Bidders fulfilling the following basic requirement shall only be considered for further evaluation:

Either the Bidder or any partner in case of Joint Venture or the Bidder's proposed Contractor/Sub-Contractor must be registered with Alternate Energy Development Board (AEDB), now merged with Private Power & Infrastructure Board (PPIB), in category C-1 under AEDB (Certification) Regulations, 2021 and has valid certification at time of submission of Bid. The Bidder is required to provide proof of this registration in the Technical Bid. If the Bidder claims to meet this mandatory requirement based on its proposed Contractor/Sub-Contractor, a commitment letter from the proposed Contractor/Sub-Contractor on their letterhead to execute the corresponding Lot(s) shall be provided by the Bidder along with the Technical Bid.

2. Qualification Criteria

2.1 Experience in Contracts of Similar Nature

Either the Bidder or any partner in case of Joint Venture or the Bidder's proposed Contractor/Sub-Contractor must have executed minimum 10 net metered solar PV projects, each having capacity of 50 kW or more, completed during last five (05) years prior to the last date of Bid Submission. The Bidder shall provide details of distributed generation concurrence documents of the system issued by NEPRA alongwith the system summary.

2.2 Financial Position

Qualification criteria to evaluate financial position of the Bidder (single entity or jointly in case of the joint venture) is given hereunder.

Credentials of the Bidder's proposed Contractors/Sub-Contractors shall not be considered for evaluation of the financial position of the Bidder.

2.2.1 Average Annual Turnover

Minimum average annual turnover of the Bidder for respective Lots as stated under, calculated

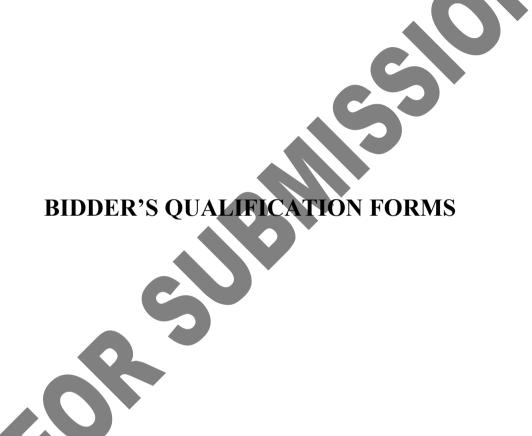
as total certified payments received for contracts in progress and/or completed within the last three (03) years, divided by three (03) years:

For Lot-1: Eq. PKR 40 Million For Lot-2: Eq. PKR 90 Million For Lot-3: Eq. PKR 350 Million For Lot-4: Eq. PKR 50 Million For Lot-5: Eq. PKR 200 Million For Lot-6: Eq. PKR 30 Million For Lot-7: Eq. PKR 175 Million

2.2.2 Financial Capabilities

The Bidder shall demonstrate that it has access to, or has available, specific liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements of respective lot as stated under, for the subject contract:

For Lot-1: Eq. PKR 80 Million For Lot-2: Eq. PKR 180 Million For Lot-3: Eq. PKR 700 Million For Lot-4: Eq. PKR 100 Million For Lot-5: Eq. PKR 400 Million For Lot-6: Eq. PKR 60 Million For Lot-7: Eq. PKR 350 Million



BIDDER'S QUALIFICATION FORMS

(Note: The Bidder shall substantiate the information provided in these Forms with valid documentary evidences otherwise the requirement will not be considered as complied.)

FORM TECH-1

LIST OF COMPLETED SOLAR PV PROJECT(s)

Sr. No.	Project Title	PV System Capacity	NEPRA Net Metering Concurrence No.	Year of Completion
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

FORM TECH-2

DETAIL OF COMPLETED SOLAR PV PROJECT

(Note: Please fill the Form Tech-2 for each completed project separately)

Project Title:	Value of the Project (in PKR):
Country: Location within Country:	Completion Period (months):
Name of Client:	
Start date (month/year): Completion date (month/year):	Design Capacity (Kw): On Grid or Hybrid:
Mode of Project execution: (EPC, PPP, BOT, BOO)	T, Lease or any other mode)
Narrative Description of Project:	

FORM TECH-3

BIDDER'S AVERAGE ANNUAL TURNOVER

Name of Bidder: _		
Joint Venture Men	mber's Name	

Annual Turnover for the Last Three (03) Years (EQ. PKR Million)			
2020-21	2021-22	2022-23	

Note:

- 1. For assessment purpose, average turnover of last three years shall be considered.
- 2. For Joint Venture, average turnover will be summed up for evaluation.
- 3. Audited Financial Statements of last three years must be attached.
- 4. In case of Joint Venture, please provide above information for all partners)

FORM TECH-4

FINANCIAL CAPABILITIES

Bidder's Name:	
Joint Venture Member's Name	

1. Financial data

Type of Financial information in Eq. PKR	Historic information for previous 03 years, (amount in PKR equivalent)		
	Year 1	Year 2	Year 3
Statement of Financial Position	(Information from B	alance Sheet)	
Total Assets (TA)		76	
Total Liabilities (TL)			
Total Equity/Net Worth (NW)			
Current Assets (CA)			
Current Liabilities (CL)			
Working Capital (WC)			
	Information from	Income Statement	
Total Revenue (TR)			
Profits Before Taxes (PBT)			
	Casl	n Flow Information	
Cash Flow from Operating Activities			

2. Sources of Finance

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

No.	Source of Finance	Amount (PKR Equivalent)
1		
2		
3		

3. Financial Documents

The Bidder shall provide copies of financial statements for three (03) years. The financial statements shall:

- (a) reflect the financial situation of the Bidder or in case of JV member, and not an affiliated entity (such as parent company or group member).
- (b) be independently audited or certified in accordance with local legislation.
- (c) be complete, including all notes to the financial statements.
- (d) correspond to accounting periods already completed and audited.
- Attached are copies of financial statements¹ for the three (03) years required above; and complying with the requirements

¹ If the most recent set of financial statements is for a period earlier than 12 months from the date of bid, the reason for this should be justified.



LETTER OF TECHNICAL BID

	Date:
	Bid Reference No:
	(Name of Project)
То:	Description of Lot:
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 design, finance, supply, install, test, commission, own, operate, maintain, and at the end of the Term, transfer the Systems in conformity with the Bidding Documents;
(c)	Our Bid consisting of the Technical Bid and the Price Bid shall be valid for a period of 120 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 undertakings and obligations of our Bid, we submit herewith a Bid Security, in the amount specified in Bidding Data Sheet, which is valid (at least) 60 days beyond validity of Bid itself.
(e)	We are not participating, as a Bidder or as a Contractor/Sub-Contractor, in more than one Bid in this bidding process, other than alternative offers submitted in accordance with IB 16 (as applicable).
(f)	We agree to permit Procuring Agency 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.
Nam	
	e Capacity of
	authorized to sign the Bid for and on behalf of:
Date	:
Addı	ress:
(Seal	

LETTER OF PRICE BID

			Date:	
			Bid Reference No:	
			(Name of Project)	
			Description of Lot:	
To);			
W	e, the	undersigned, declare that:		
a.	a. We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with instructions to Bidders (IB) 9;			
b	b Our financial proposal as stated in the Schedule of Prices, is as hereunder:			
	i.	Sum of Guaranteed Total Annual Energ	y Yield of all Sites included in the Lot =	
	ii.	Sum of Annual Lease Rental of all Pakistani Rupeees	Sites included in the Lot =	
	iii.	Average Unit Rate for the Lot =	PKR/kWh	
c Our Bid shall be valid for a period of 120 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	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 Agreement is executed in accordance with the Bidding Documents;				
f We do hereby declare that the Bid is made without any collusion, comparison of figures or arrangement with any other Bidder for the Project;				
g We understand that you are not bound to accept the most advantageous Bid or any other Bid that you may receive;				
h	othe pern	er documents relating to the Bid submis- mission is extended for verification of an	epresentative to inspect our accounts and records and ssion and to have them audited by auditors. This y information provided in our Technical Bid which accordance with IB 11.1 of the Bidding Data Sheet;	
Name				
In	the ca	apacity of		
Signed				

Duly authorized to sign the Bid for and on	behalf of	
Date		
Address		
	(Seal)	



APPENDICES

PROPOSED CONSTRUCTION SCHEDULE

[The Project 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 (CPM, PERT or any other to be specified herein) 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 Project and parts of the Project shall not exceed the time period specified in the Contract Data. Such period shall commence in accordance with the terms and conditions of the Contract Agreement.]

METHOD OF PERFORMING THE PROJECT

[The Bidder is required to submit a narrative outlining the method of performing the Project. 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 in Pakistan, 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 Project, 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.]



LIST OF CONTRACTORS/SUB-CONTRACTORS

[Name of Bidder] intend to Sub-Contract the following parts of the Project to Contractors/Sub-Contractors. We hereby confirm that the Contractors/Sub-Contractors named hereunder are reliable and competent to perform that part of the Project for which each is listed.

Please find enclosed the documentation outlining experience of Contractors/Sub-Contractors, the curriculum vitae and experience of their key personnel who will be assigned to the Contract, equipment to be supplied by them, size, location and type of contracts carried out in the past.

Part of Project	Contractor/Sub-Contractor
(Give Details)	(With Complete Address)
1	2

ORGANIZATION CHART

(FOR THE INSTALLATION OF SOLAR PV SYSTEM AND OPERATION & MAINTENANCE)

[Please insert the complete details of the staff who will monitor and ensure the quality installation and commissioning of the Systems and subsequent O&M for the whole Term.]

TECHNICAL DESIGN SPECIFICATIONS AND DATA

1. LIST OF SITES IN EACH LOT / DIVISION

The following is the list of stations/locations included in each Lot/Division. Each station/location included in the Lots is referred to as the "Site" and collectively as the "Sites." Except for PLF Risalpur, which is part of Lot 1, all Sites shall have net metering-based solar PV systems, and the Bidder shall obtain net metering licenses accordingly. For PLF Risalpur, the Bidder shall be responsible for obtaining a distributed generation license.

Lot 1: Peshawar Division

Sr. No.	Stations / Locations / Sites in Lot 1
1	DS Office Pakistan Railway Peshawar
2	PLF Risalpur

Lot 2: Rawalpindi Division

Sr. No.	Stations / Locations / Sites in Lot 2
1	Carriage Factory Islamabad
2	Central Diesel Locomotive
3	Railway Loco Shed Rawalpindi
4	DS Office Rawalpindi & Station building

Lot 3: Lahore Division

Sr. No.	Stations / Locations / Sites in Lot 3
1	Railway Headquarters Office Lahore
2	PR Walton Academy Lahore
3	Raiwind New Building & CBI
4	PR Power House – 1
5	PR Power House – 2
6	PR Power House – 3
7	Steel Shop MGPR
8	Faisalabad station and Loco Shed

Lot 4: Mutan Division

Sr. No.	Stations / Locations / Sites in Lot 4
1	Multan Cantt Station & Railway Hospital
2	Divisional Superintendent Office Multan & Loco Shed
3	Khanewal (Old Building) Power House & Station

Lot 5: Sukkur Division

Sr. No.	Stations / Locations / Sites in Lot 5
1	Sukkur station and DS office & Hospital
2	Daur CBI Hybrid
3	Gambat CBI Hybrid
4	Bandhi CBI Hybrid
5	Kotlalu CBI
6	Loco Shed Rohri & Rohri station
7	Mirpur Mathelo CBI
8	Ghotki CBI
9	Mahesar CBI
10	Pano Akil CBI
11	Begmanji CBI
12	Tando Masti Khan CBI
13	Ranipur Riasat CBI
14	Setharja CBI
15	Mehrabpur CBI
16	Lakha Road CBI
17	Bhiria Road CBI
18	Padidan CBI
19	Bucheri CBI
20	Sarhari CBI
21	Lundo CBI
22	Shahdadpur CBI

Lot 6: Quetta Division

Sr. No.	Stations / Locations / Sites in Lot 6
1	DS Office Quetta and Quetta station

Lot 7: Karachi Division

Sr. No.	Stations / Locations / Sites in Lot 7
1	Marshalling Yard Pipri
2	DS Office and Karachi city
3	Karachi Cantt Station
4	C&W Shop Hyderabad
5	Diesel Shed with TTC hostel

2. MINIMUM TECHNICAL SPECIFICATIONS

The following are the minimum technical specifications with which the Bidder must comply. The Bidder is required to confirm their compliance with the stated requirements, or otherwise, by indicating 'Yes' or 'No' in the designated column.

Solar PV Modules	Equipment	Minimum Technical Specifications	Agreed by Bidder (Yes / No)
Tier 1 Manufacturer as per the most recent Bloomberg list and atleast A rated as per PV Module-Tech Ratings 540W or higher with positive tolerance only 20% or higher module efficiency 25 Year Linear Performance Warranty 12 Year Material and Workmanship Warranty Power Output after 25 Years ≥ 80% Module Temperature Coefficient at Pmax of 0.35%/PC or lesser Barcode Identification Efficiency at 200 W/m²≥ 96% of STC Compliance with S.R.O 604 defined Pre-shipment inspection and import requirements UV resistant, Hot Dip Galvanized Steel frame of Required Gauge and at least 85 micron or higher zinc coating Shall withstand wind speeds of 150 km/h PV module fastening: As per module manufacturer guidelines Anticlimb spikes for Outdoor Poles Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation		IEC 61215 Certified	
atleast A rated as per PV Module-Tech Ratings 540W or higher with positive tolerance only 20% or higher module efficiency 25 Year Linear Performance Warranty 12 Year Material and Workmanship Warranty Power Output after 25 Years ≥ 80% Module Temperature Coefficient at P _{max} of -0.35% // C or lesser Barcode Identification Efficiency at 200 W/m²≥ 96% of STC Compliance with S.R.O 604 defined Pre-shipment inspection and import requirements UV resistant, Hot Dip Galvanized Steel frame of Required Gauge and at least 85 micron or higher zinc coating Shall withstand wind speeds of 150 km/h PV module fastening: As per module manufacturer guidelines Anticlimb spikes for Outdoor Poles Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation		Application/ Safety Class II as defined under IEC 61730	
Solar PV Modules 20% or higher module efficiency 25 Year Linear Performance Warranty 12 Year Material and Workmanship Warranty Power Output after 25 Years ≥ 80% Module Temperature Coefficient at Pana, of 0.35%/C or lesser Barcode Identification Efficiency at 200 W/m²≥ 96% of STC Compliance with S.R.O 604 defined Pre-shipment inspection and import requirements UV resistant, Hof Dip Galvanized Steel frame of Required Gauge and at least 85 micron or higher zinc coating Shall withstand wind speeds of 150 km/h PV module fastening: As per module manufacturer guidelines Antitlefit screws for PV Modules Structure Anticlimb spikes for Outdoor Poles Rawal bolts, Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation			
Solar PV Modules 25 Year Linear Performance Warranty 12 Year Material and Workmanship Warranty Power Output after 25 Years ≥ 80% Module Temperature Coefficient at P _{max} of 0.35% //C or lesser Barcode Identification Efficiency at 200 W/m²≥ 96% of STC Compliance with S.R.O. 604 defined Pre-shipment inspection and import requirements UV resistant, Hot Dip Galvanized Steel frame of Required Gauge and at least 85 micron or higher zinc coating Shall withstand wind speeds of 150 km/h PV module fastening: As per module manufacturer guidelines Antitleft screws for PV Modules Structure Anticlimb spikes for Outdoor Poles Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation		540W or higher with positive tolerance only	
12 Year Material and Workmanship Warranty		20% or higher module efficiency	
Power Output after 25 Years ≥ 80% Module Temperature Coefficient at Pnax of 0.35%/C or lesser Barcode Identification Efficiency at 200 W/m² ≥ 96% of STC Compliance with S.R.O 604 defined Pre-shipment inspection and import requirements: UV resistant, Hot Dip Galvanized Steel frame of Required Gauge and at least 85 micron or higher zinc coating Shall withstand wind speeds of 150 km/h PV module fastening. As per module manufacturer guidelines Antitleft screws for PV Modules Antitleft screws for Outdoor Poles Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation		25 Year Linear Performance Warranty	
Module Temperature Coefficient at P _{max} of 0.35%/9°C or lesser Barcode Identification Efficiency at 200 W/m²≥ 96% of STC Compliance with S.R.O 604 defined Pre-shipment inspection and import requirements UV resistant, Hot Dip Galvanized Steel frame of Required Gauge and at least 85 micron or higher zinc coating Shall withstand wind speeds of 150 km/h PV module fastening: As per module manufacturer guidelines Antitheft screws for PV Modules Anticlimb spikes for Outdoor Poles Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation	Solar PV Modules	12 Year Material and Workmanship Warranty	
Barcode Identification Efficiency at 200 W/m²≥ 96% of STC Compliance with S.R.O 604 defined Pre-shipment inspection and import requirements UV resistant, Hot Dip Galvanized Steel frame of Required Gauge and at least 85 micron or higher zinc coating Shall withstand wind speeds of 150 km/h PV module fastening: As per module manufacturer guidelines Anticlimb spikes for Outdoor Poles Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation		Power Output after 25 Years ≥ 80%	
Efficiency at 200 W/m²≥ 96% of STC Compliance with S.R.O 604 defined Pre-shipment inspection and import requirements UV resistant, Hot Dip Galvanized Steel frame of Required Gauge and at least 85 micron or higher zinc coating Shall withstand wind speeds of 150 km/h PV module fastening. As per module manufacturer guidelines Antitheft screws for PV Modules Anticlimb spikes for Outdoor Poles Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation			
Compliance with S.R.O 604 defined Pre-shipment inspection and import requirements UV resistant, Hot Dip Galvanized Steel frame of Required Gauge and at least 85 micron or higher zinc coating Shall withstand wind speeds of 150 km/h PV module fastening: As per module manufacturer guidelines Antitheft screws for PV Modules Anticlimb spikes for Outdoor Poles Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation		Barcode Identification	
and import requirements UV resistant, Hot Dip Galvanized Steel frame of Required Gauge and at least 85 micron or higher zinc coating Shall withstand wind speeds of 150 km/h PV module fastening: As per module manufacturer guidelines Antitheft screws for PV Modules Anticlimb spikes for Outdoor Poles Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation		Efficiency at 200 W/m ² ≥ 96% of STC	
Solar PV Mounting Structure Solar PV Mounting Structure Anticlimb spikes for Outdoor Poles Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation			
Solar PV Mounting Structure PV module fastening: As per module manufacturer guidelines Antitheft screws for PV Modules Anticlimb spikes for Outdoor Poles Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation			
Mounting Structure Anticlimb spikes for Outdoor Poles Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation		Shall withstand wind speeds of 150 km/h	
Anticlimb spikes for Outdoor Poles Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation	Solar PV	PV module fastening: As per module manufacturer guidelines	
Rawal bolts: Stainless Steel (Grade-304) Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation		Antitheft screws for PV Modules	
Anchoring to existing rooftop slabs shall NOT be performed Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation	Structure	Anticlimb spikes for Outdoor Poles	
Compliance with Pakistan Building Code Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation		Rawal bolts: Stainless Steel (Grade-304)	
Three Phase On-grid Net-metered for Non-CBI Sites and Three Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation		Anchoring to existing rooftop slabs shall NOT be performed	
Phase Hybrid Net Metered for CBI Sites String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation			
String Inverter with Power Factor in compliance with NEPRA Requirements Sheds and enclosures for outdoor installation			
Sheds and enclosures for outdoor installation			
50 Hz Frequency Output		1	
		50 Hz Frequency Output	
Inverters and CEC Efficiency of 98% or above	Inverters and	CEC Efficiency of 98% or above	
Grid/ Genset IP65 rated or higher		IP65 rated or higher	
Synchronization 10 Year Warranty	Synchronization	10 Year Warranty	
THD ≤ 3%		THD ≤ 3%	
IEC 62109/UL1741 Compliant Safety Design		IEC 62109/UL1741 Compliant Safety Design	
Ambient Operating Temperature Range: -25 °C to 60 °C			
DC/AC ratio not more than 1.2			

Equipment	Minimum Technical Specifications	Agreed by Bidder (Yes / No)
	Residual Current Monitoring	
	DC Insulation Resistance Detection	
	Generator Synchronization Module	
	AC and DC Surge Arrestors: Type II or better	
	AC Overcurrent Protection	
	DC Reverse Polarity Protection	
	Arc Fault Current Interruption (AFCI) Protection	
	PV Array String Fault Monitoring	
	Anti-Islanding Protection	
	WiFi and Cloud Communication	
	Compliance with S.R.O 604 defined pre-shipment inspection and import requirements	
	Copper Cables with purity of 99.99% or higher	
	UL 4703 compliant Low Smoke Halogen Free XLPO / XLPE	
	DC cable size : $\geq 04 \text{ mm2}$ AC cable size : $\leq 2\%$ voltage drop at Inverter Power at Unity Power Factor	
AC,DC Cables,	Conduits for Cables	
Lightning	Trenching, Civil Works and Backfilling (As applicable)	
Protection, Earthing wires &	Seamless Terminations	
Cable Trays	Perforated Cable Trays of ≥ 16 Gauge with 60 microns of Zinc Coating	
	Labeling of all strings/equipment shall be mandatory	
	06 mm ² earth wire for equipotential bonding	
	Cables to be laid in UPVC/corrugated PVC pipes and cable trays only	
	Circuit Breakers	
	Changeover Switches	
	Class-II Surge protection separate for AC & DC sides	
	Separate DC and AC Earthing each with 5 Ohms or lesser resistance	
Breakers, Surge	Non-Isolated Lightning Arrestors	
Arrester,	Protection against lightning currents of 31 kA or higher	
Lightning Protection, DBs,	In case of LV panel installation, the panel shall be IP54 rated	
LV Panel etc.	with galvanized material of at least 16 gauge with protection Scheme as per IEC Standard 62548, having Input and Output Circuit Breakers as per IEC Standards, Bus Bar Current Bearing Capacity as per requirement, Isolators for Bus Bars and AC Grounding Bus Bar.	
	The panel shall have Digital Ammeter and Voltmeter, RYB indicator with Breather Vents on both Sides of cabinets	
Metering, Monitoring and	2 x Energy Meters with specifications as approved by the DISCO	

Equipment	Minimum Technical Specifications	Agreed by Bidder (Yes / No)
Control System	2 x Energy Meter Box	
	System for monitoring and logging of array level input and system output	
	Communication through the following: 1. RS485/RS232/TTL/USB for onsite data collection/monitoring	
	2. GPRS/4G for realtime data transfer to Client's defined server (subscription of GPRS/4G to be paid by the Lessor) 3. Wifi/Bluetooth Module for localized wireless communication 4. Alarm Messages (SMS & Email) for Fault/ Grid Outage / Generator Outage / Inverter Outage etc.	
Net Metering Application,	Compliance with all prevailing regulations set forth by NEPRA for net metering purposes and SOPs by respective DISCO	
Preparation, Inspection by DISCO and	Procurement of Bidirectional meters for all Sites (except PLF Risalpur with zero export device) or as required by NEPRA/DISCO	
Installation of Bidirectional Meter	Grid Integration studies as per prevailing NEPRA requirements wherever applicable	
Netei	Preparation, submission and approval of application for net metering and captive/distributed generation	
	Operating status (On/Off) Vdc Vac	
	Pdc Pac	
Inverter Data Logger Collection	System Frequency Grid Status	
of Data and	Generator Status (from Genset Sync. Module)	
Integration with Remote Server	Fault Detection	
	Hourly and Daily Energy Supplied by PV System	
	Total Energy Supplied by PV System	
	Plant Performance Data Check: Every 15 Seconds or lesser	
	Remote Server Integration	
	Total Energy Supplied by Genset (from Genset Sync. Module)	
	75 kWh Battery Storage Capacity at Each CBI Station with	
	Hybrid Inverter Technology: Lithium Ferrophosphate	
	Protection Class: IP20 or higher for indoor installation	
75 kWh	Operating and Nominal Voltage: Compliant with Hybrid	
Battery Storage System at all CBI	Inverter and Battery Storage	
Stations Stations	Charge/Discharge Rate: Upto 0.5C	
	DoD: 90% or higher	
	No. of cycles: 2,500 at 70% DoD	
	Operating Temperature: -5 to +45 C	

Equipment	Minimum Technical Specifications	Agreed by Bidder (Yes / No)
	Standard Compliance: UL 1642 and other International Standards	
	Battery Management System: Battery Temperature, Discharge Control and Overload Protection, etc.	•
	Service Life: A cumulative of 5,000 hours of loadshedding/ Grid non-availability	

3. SYSTEM RATING AND ENERGY YIELDS

The following are the solar PV peak kW rating at STC ("the Reference Rating" or "RR") and annual energy yields in kWh (the "Reference Annual Energy Yield" or "RAEY") worked out by the Procuring Agency for the Systems to be installed at each Site based on the detailed study conducted on these Sites. The Bidder is required fill in their proposed solar peak kW rating at STC (the "Committed Rating" or "CR") and the Guaranteed Annual Energy Yield against the Systems to be installed at each Site included in the Lot. The Bidder is free to propose the Committed Rating and the Guaranteed Annual Energy Yield provided these meet the following criteria:

- A) The Committed Rating for each Site does not vary by ±10% from the Reference Rating of that Site
- B) The Guaranteed Annual Energy Yield for each Site does not vary by ±2% from the Reference Annual Energy Yield of that Site

Failing to comply with any of the above stated criteria shall lead to rejection of the Bid.



Lot 1: Peshawar Division

Sr. No.	Sites in Lot 1	Reference Rating (RR) (kW)	Reference Annual Energy Yield (RAEY) (kWh/annum)	Committed Rating (CR) (kW)	Guaranteed Annual Energy Yield (GAEY) (kWh/annum)
1	DS Office Pakistan Railway Peshawar	284	429,000		
2	PLF Risalpur	501	694,000		
	Total	$\sum RR = 785$	$\sum RAEY = 1,123,000$	$\sum CR =$	$\sum GAEY =$

Lot 2: Rawalpindi Division

Sr. No.	Sites in Lot 2	Reference Rating (RR) (kW)	Reference Annual Energy Yield (RAEY) (kWh/annum)	Committed Rating (CR) (kW)	Guaranteed Annual Energy Yield (GAEY) (kWh/annum)
1	Carriage Factory Islamabad	610	907,000		
2	Central Diesel Locomotive	464	688,000		
3	Railway Loco Shed Rawalpindi	294	408,000		
4	DS Office Rawalpindi & Station building	285	387,000	_	
	Total	$\sum RR = 1,653$	$\sum RAEY = 2,390,000$	$\sum CR =$	$\sum GAEY=$

Lot 3: Lahore Division

Sr. No.	Sites in Lot 3	Reference Rating (RR) (kW)	Reference Annual Energy Yield (RAEY) (kWh/annum)	Committed Rating (CR) (kW)	Guaranteed Annual Energy Yield (GAEY) (kWh/annum)
1	Railway Headquarters Office Lahore	649	902,000		
2	PR Walton Academy Lahore	468	643,000		
3	Raiwind New Building & CBI	309	401000		
4	PR Power House – 1	1,000	1,413,333		
5	PR Power House – 2	1,000	1,413,333		
6	PR Power House – 3	1,000	1,413,333		
7	Steel Shop MGPR	2 x 1,000	2,780,000		
8	Faisalabad station and Loco Shed	345	454,400		
	Total	$\sum RR = 6,771$	$\sum RAEY = 9,420,399$	$\Sigma CR =$	$\sum GAEY =$

Lot 4: Mutan Division

Sr. No.	Sites in Lot 4	Reference Rating (RR) (kW)	Reference Annual Energy Yield (RAEY) (kWh/annum)	Committed Rating (CR) (kW)	Guaranteed Annual Energy Yield (GAEY) (kWh/annum)
1	Multan Cantt Station & Railway Hospital	375	492,000		
2	Divisional Superintendent Office Multan & Loco Shed	241	331,000		
3	Khanewal (Old Building) Power House & Station	297	411,000		
	Total	$\sum RR = 913$	$\sum RAEY = 1,234,000$	$\sum CR =$	$\sum GAEY=$

Lot 5: Sukkur Division

Sr. No.	Sites in Lot 5	Reference Rating (RR) (kW)	Reference Annual Energy Yield (RAEY) (kWh/annum)	Committed Rating (CR) (kW)	Guaranteed Annual Energy Yield (GAEY) (kWh/annum)
1	Sukkur station and DS office & Hospital	1,000	1,485,000		
2	Daur CBI Hybrid	53	77,100		
3	Gambat CBI Hybrid	60	87,000		
4	Bandhi CBI Hybrid	54	76,600		
5	Kotlalu CBI	52	76,900		
6	Loco Shed Rohri & Rohri station	1,000	1,470,000		
7	Mirpur Mathelo CBI	73	103,000		
8	Ghotki CBI	54	77,300		
9	Mahesar CBI	53	77,100		
10	Pano Akil CBI	61	88,400		
11	Begmanji CBI	53	79,100		
12	Tando Masti Khan CBI	62	89,000		
13	Ranipur Riasat CBI	65	94,900		
14	Setharja CBI	56	81,600		
15	Mehrabpur CBI	60	90,400		
16	Lakha Road CBI	60	86,500		
17	Bhiria Road CBI	68	100,900		
18	Padidan CBI	55	84,000		
19	Bucheri CBI	55	68,700		
20	Sarhari CBI	52	74,900		
21	Lundo CBI	60	89,400		
22	Shahdadpur CBI	32	48,000		
	Total	$\sum RR = 3,138$	$\sum RAEY = 4,605,800$	$\sum CR =$	$\sum GAEY =$

Lot 6: Quetta Division

Sr. No.	Sites in Lot 6	Reference Rating (RR) (kW)	Reference Annual Energy Yield (RAEY) (kWh/annum)	Committed Rating (CR) (kW)	Guaranteed Annual Energy Yield (GAEY) (kWh/annum)
1	DS Office Quetta and Quetta station	510	805,000		
	Total	$\sum RR = 510$	$\sum RAEY = 805,000$	$\sum CR =$	$\sum GAEY =$



Lot 7: Karachi Division

Sr. No.	Sites in Lot 7	Reference Rating (RR) (kW)	Reference Annual Energy Yield (RAEY) (kWh/annum)	Committed Rating (CR) (kW)	Guaranteed Annual Energy Yield (GAEY) (kWh/annum)
1	Marshalling Yard Pipri	353	521,000		
2	DS Office and Karachi city	1,000	1,486,000		
3	Karachi Cantt Station	1,000	1,437,000		
4	C&W Shop Hyderabad	332	496,000		
5	Diesel Shed with TTC hostel	755	1,133,000		
	Total	$\sum RR = 3,440$	$\sum RAEY = 5,073,000$	$\sum CR =$	$\sum GAEY =$

JOINT VENTURE AGREEMENT/LETTER OF INTENT

[Please provide Joint Venture (JV) Agreement or Letter of Intent, if applicable.]



INTEGRITY PACT

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

Contract No	Dated		
	as stated in Letter of Price Bid		
Contract Title: S	solarization of Pakistan Railv (BOOT Model)-Phase I	vays Buildings on Lease Purchase Agre	eemen
induced the proc benefit from Gov	urement of any contract, rig vernment of Pakistan (GoP)	der] hereby declares that it has not obtain ght, interest, privilege or other obligat or any administrative subdivision or a by GoP through any corrupt business pro-	tion or agency
that it has fully on not given or agree Pakistan either of affiliate, agent, subsidiary, any of as consultation for a contract, right,	declared the brokerage, commeed to give and shall not give directly or indirectly through associate, broker, consultant commission, gratification, bribee or otherwise, with the objective commission.	ing, [name of Bidder] represents and waission, fees etc. paid or payable to anyour error any natural or juridical person, include, director, promoter, shareholder, sport oe, finder's fee or kickback, whether despect of obtaining or inducing the procurent obligation or benefit in whatsoever formulated pursuant hereto.	one and outside ling its a sor or scribed ment of
arrangements with	n all persons in respect of or r	will make full disclosure of all agreement related to the transaction with GoP and lection to circumvent the above declar	has no
declaration, not no defeat the purpose right, interest, pri without prejudice	haking full disclosure, misrepe of this declaration, representation or the colligation or be a second	y and strict liability for making any presenting facts or taking any action lil tation and warranty. It agrees that any connection obtained or procured as aforesaidlies available to GoP under any law, control.	kely to ontract d shall
agrees to indemn business practices the sum of any co Bidder] as aforesa	ify GoP for any loss or dan and further pay compensation commission, gratification, bribuid for the purpose of obtaining	cised by GoP in this regard, [name of I mage incurred by it on account of its of the control of	corrup en time ame of
Name of Bidder:	Name	of Procuring Agency:	
Signature:	Signat	ure:	
[Seal]		[Seal]	

Lot-1 (Peshawar Division)

	Schedule of Prices for Lot-1 (Peshawar Division)					
Sr. No.	Site Description	Guaranteed Annual Energy Yield (GAEY) (kWh / Annum)	Annual Lease Rental (ALR) (PKR)			
1	DS Office Pakistan Railway Peshawar					
2	PLF Risalpur					
	Total	$\sum GAEY =$	∑ALR=			

Average Unit Rate for Lot-1 (Peshawar Division):PKR/kWh

Where

$$Average\ Unit\ Rate = \frac{Sum\ of\ Annual\ Lease\ Rental\ of\ all\ Facilities\ included\ in\ the\ Lot}{Sum\ of\ Guaranteed\ Annual\ Energy\ Yield\ per\ Annum\ of\ all\ Facilities\ included\ in\ the\ Lot}$$

$$Average\ Unit\ Rate = \frac{\sum ALR}{\sum GAEY}$$

- 1. All fields are mandatory; failure to comply shall result in the rejection of the Bid
- 2. The Guaranteed Annual Energy Yield must be the same as provided in the Technical Bid. In case of any discrepancies, the value stated in the Technical Bid shall prevail.
- 3. The Average Unit Rate is computed solely for the purpose of comparing bids. Payments to the Lessor will be made based on the Annual Lease Rental quoted for each Site in this Schedule of Prices, following the terms and conditions outlined in the Contract Agreement.

Lot-2 (Rawalpindi Division)

	Schedule of Prices for Lot-2 (Rawalpindi Division)					
Sr. No.	Site Description	Guaranteed Annual Energy Yield (GAEY) (kWh / Annum)	Annual Lease Rental (ALR) (PKR)			
1	Carriage Factory Islamabad					
2	Central Diesel Locomotive					
3	Railway Loco Shed Rawalpindi					
4	DS Office Rawalpindi & Station building					
	Total	$\sum GAEY =$	$\sum ALR=$			

Where

$$Average\ Unit\ Rate = \frac{Sum\ of\ Annual\ Lease\ Rental\ of\ all\ Facilities\ included\ in\ the\ Lot}{Sum\ of\ Guaranteed\ Annual\ Energy\ Yield\ per\ Annum\ of\ all\ Facilities\ included\ in\ the\ Lot}$$

$$Average\ Unit\ Rate = \frac{\sum ALR}{\sum GAEY}$$

- 1. All fields are mandatory; failure to comply shall result in the rejection of the Bid
- 2. The Guaranteed Annual Energy Yield must be the same as provided in the Technical Bid. In case of any discrepancies, the value stated in the Technical Bid shall prevail.
- 3. The Average Unit Rate is computed solely for the purpose of comparing bids. Payments to the Lessor will be made based on the Annual Lease Rental quoted for each Site in this Schedule of Prices, following the terms and conditions outlined in the Contract Agreement.

Lot-3 (Lahore Division)

	Schedule of Prices for Lot-3 (Lahore Division)					
Sr. No.	Site Description	Guaranteed Annual Energy Yield (GAEY) (kWh / Annum)	Annual Lease Rental (ALR) (PKR)			
1	Railway Headquarters Office Lahore					
2	PR Walton Academy Lahore					
3	Raiwind New Building & CBI					
4	PR Power House – 1					
5	PR Power House – 2					
6	PR Power House – 3					
7	Steel Shop MGPR					
8	Faisalabad station and Loco Shed					
	Total	$\sum GAEY =$	$\sum ALR=$			

Average Unit Rate for Lot-3 (Lahore Division):PKR/kWh

Where

$$Average\ Unit\ Rate = \frac{Sum\ of\ Annual\ Lease\ Rental\ of\ all\ Facilities\ included\ in\ the\ Lot}{Sum\ of\ Guaranteed\ Annual\ Energy\ Yield\ per\ Annum\ of\ all\ Facilities\ included\ in\ the\ Lot}$$

$$Average\ Unit\ Rate = \frac{\sum ALR}{\sum GAEY}$$

- 1. All fields are mandatory; failure to comply shall result in the rejection of the Bid
- 2. The Guaranteed Annual Energy Yield must be the same as provided in the Technical Bid. In case of any discrepancies, the value stated in the Technical Bid shall prevail.
- 3. The Average Unit Rate is computed solely for the purpose of comparing bids. Payments to the Lessor will be made based on the Annual Lease Rental quoted for each Site in this Schedule of Prices, following the terms and conditions outlined in the Contract Agreement.

Lot-4 (Multan Division)

Schedule of Prices for Lot-4(Multan Division)			
Sr. No.	Site Description	Guaranteed Annual Energy Yield (GAEY) (kWh / Annum)	Annual Lease Rental (ALR) (PKR)
1	Multan Cantt Station & Railway Hospital		
2	Divisional Superintendent Office Multan & Loco Shed		
3	Khanewal (Old Building) Power House & Station		
	Total	$\sum GAEY =$	$\sum ALR=$

Average Unit Rate for Lot-4 (Multan Division):PKR/kWh

Where

$$Average\ Unit\ Rate = \frac{Sum\ of\ Annual\ Lease\ Rental\ of\ all\ Facilities\ included\ in\ the\ Lot}{Sum\ of\ Guaranteed\ Annual\ Energy\ Yield\ per\ Annum\ of\ all\ Facilities\ included\ in\ the\ Lot}$$

$$Average\ Unit\ Rate = \frac{\sum ALR}{\sum GAEY}$$

- 1. All fields are mandatory; failure to comply shall result in the rejection of the Bid
- 2. The Guaranteed Annual Energy Yield must be the same as provided in the Technical Bid. In case of any discrepancies, the value stated in the Technical Bid shall prevail.
- 3. The Average Unit Rate is computed solely for the purpose of comparing bids. Payments to the Lessor will be made based on the Annual Lease Rental quoted for each Site in this Schedule of Prices, following the terms and conditions outlined in the Contract Agreement.

Lot-5 (Sukkur Division)

Schedule of Prices for Lot-5 (Sukkur Division)			
Sr. No.	Site Description	Guaranteed Annual Energy Yield (GAEY) (kWh / Annum)	Annual Lease Rental (ALR) (PKR)
1	Sukkur station and DS office & Hospital		
2	Daur CBI Hybrid		
3	Gambat CBI Hybrid		
4	Bandhi CBI Hybrid		
5	Kotlalu CBI		
6	Loco Shed Rohri & Rohri station		
7	Mirpur Mathelo CBI		
8	Ghotki CBI		
9	Mahesar CBI		
10	Pano Akil CBI		
11	Begmanji CBI		
12	Tando Masti Khan CBI		
13	Ranipur Riasat CBI		
14	Setharja CBI		
15	Mehrabpur CBI		
16	Lakha Road CBI		
17	Bhiria Road CBI		
18	Padidan CBI		
19	Bucheri CBI		
20	Sarhari CBI		
21	Lundo CBI		
22	Shahdadpur CBI		
	Total	$\sum GAEY =$	$\sum ALR=$

Average Unit Rate for Lot-5 (Sukkur Division): PKR / kWh

Where

Average Unit Rate =
$$\frac{Sum \ of \ Annual \ Lease \ Rental \ of \ all \ Facilities \ included \ in \ the \ Lot}{Sum \ of \ Guaranteed \ Annual \ Energy \ Yield \ per \ Annum \ of \ all \ Facilities \ included \ in \ the \ Lot}{\sum ALP}$$

Average Unit Rate = $\frac{\sum ALR}{\sum GAEY}$

- 1. All fields are mandatory; failure to comply shall result in the rejection of the Bid
- 2. The Guaranteed Annual Energy Yield must be the same as provided in the Technical Bid. In case of any discrepancies, the value stated in the Technical Bid shall prevail.
- 3. The Average Unit Rate is computed solely for the purpose of comparing bids. Payments to the Lessor will be made based on the Annual Lease Rental quoted for each Site in this Schedule of Prices, following the terms and conditions outlined in the Contract Agreement.

Lot-6 (Quetta Division)

Schedule of Prices for Lot-6 (Quetta Division)			
Sr. No.	Site Description	Guaranteed Annual Energy Yield (GAEY) (kWh / Annum)	Annual Lease Rental (ALR) (PKR)
1	DS Office Quetta and Quetta station		
	Total	$\sum GAEY =$	$\sum ALR =$

Average Unit Rate for Lot-6 (Quetta Division): PKR / kWh

Where

$$Average\ Unit\ Rate = \frac{Sum\ of\ Annual\ Lease\ Rental\ of\ all\ Facilities\ included\ in\ the\ Lot}{Sum\ of\ Guaranteed\ Annual\ Energy\ Yield\ per\ Annum\ of\ all\ Facilities\ included\ in\ the\ Lot}$$

$$Average\ Unit\ Rate = \frac{\sum ALR}{\sum GAEY}$$

- 1. All fields are mandatory; failure to comply shall result in the rejection of the Bid
- 2. The Guaranteed Annual Energy Yield must be the same as provided in the Technical Bid. In case of any discrepancies, the value stated in the Technical Bid shall prevail.
- 3. The Average Unit Rate is computed solely for the purpose of comparing bids. Payments to the Lessor will be made based on the Annual Lease Rental quoted for each Site in this Schedule of Prices, following the terms and conditions outlined in the Contract Agreement.



Lot-7 (Karachi Division)

Schedule of Prices for Lot-7 (Karachi Division)			
Sr. No.	Site Description	Guaranteed Annual Energy Yield (GAEY) (kWh / Annum)	Annual Lease Rental (ALR) (PKR)
1	Marshalling Yard Pipri		
2	DS Office and Karachi city		
3	Karachi Cantt Station		
4	C&W Shop Hyderabad		
5	Diesel Shed with TTC hostel		
	Total	$\sum GAEY =$	$\sum ALR=$

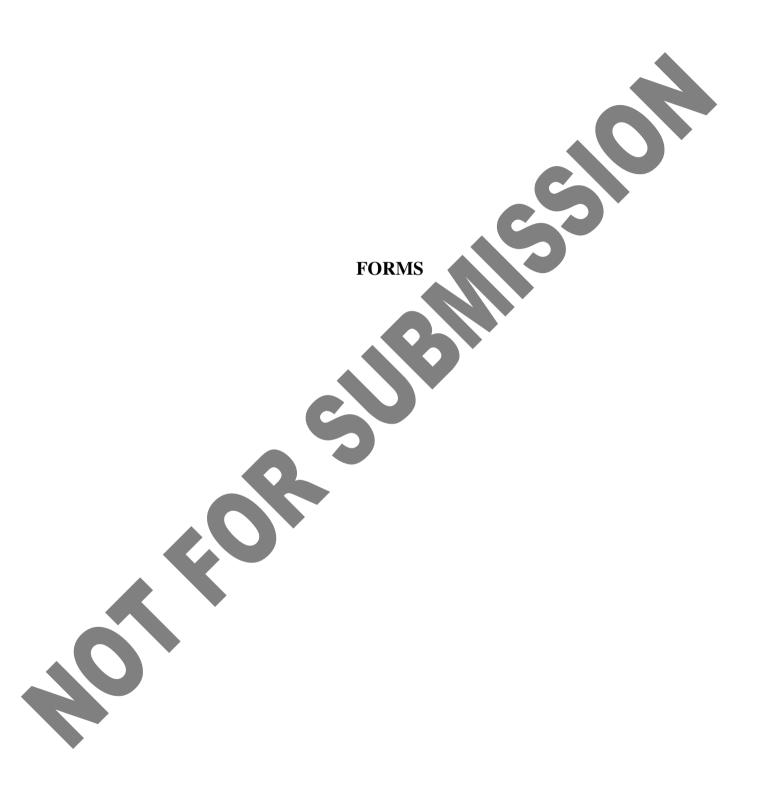
Average Unit Rate for Lot-7 (Karachi Division): PKR/kWh

Where

$$Average\ Unit\ Rate = \frac{Sum\ of\ Annual\ Lease\ Rental\ of\ all\ Facilities\ included\ in\ the\ Lot}{Sum\ of\ Guaranteed\ Annual\ Energy\ Yield\ per\ Annum\ of\ all\ Facilities\ included\ in\ the\ Lot}$$

$$Average\ Unit\ Rate = \frac{\sum ALR}{\sum GAEY}$$

- 1. All fields are mandatory; failure to comply shall result in the rejection of the Bid
- 2. The Guaranteed Annual Energy Yield must be the same as provided in the Technical Bid. In case of any discrepancies, the value stated in the Technical Bid shall prevail.
- 3. The Average Unit Rate is computed solely for the purpose of comparing bids. Payments to the Lessor will be made based on the Annual Lease Rental quoted for each Site in this Schedule of Prices, following the terms and conditions outlined in the 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.	
	, that in pursuance of the terms of the Bid and at the Surety above named, are held and firmly bound unto
	n the sum stated above for the payment of which sum s, our heirs, executors, administrators and successors,
	IS SUCH, that whereas the Bidder has submitted the for (Particulars of Bid) to the said
Procuring Agency; and	
WHEREAS the Procuring Agency has requi	gired as a condition for considering said Bid that the

WHEREAS, the Procuring Agency 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 Procuring Agency, conditioned as under:

- 1) that the Bid Security shall remain in force up to and including the date [___] days after the deadline for validity of Bids as stated in the Instructions to Bidders or as it may be extended by the Procuring Agency, notice of which extension(s) to the Surety is hereby waived;
- 2) that the Bid Security of unsuccessful Bidders will be returned by the Procuring Agency 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 Project and furnish the required Performance Security, the entire said sum be paid immediately to the said Procuring Agency 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 formal Contract Agreement with the said Procuring Agency in accordance with his Bid as accepted and furnish within [___] days of his being requested to do so, a Performance Security with good and sufficient surety, as may be required, upon the form prescribed by the said Procuring Agency 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 Procuring Agency the said sum upon first written demand of the Procuring Agency (without cavil or argument) and without requiring the Procuring Agency to prove or to show grounds or reasons for such demand, notice of which shall be sent by the Procuring Agency by registered post duly addressed to the Surety at its address given above.

PROVIDED ALSO THAT the Procuring Agency shall be the sole and final judge for deciding whether the 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 Procuring Agency forthwith and without any reference to the Bidder or any other person.

IN WITNESS WHEREOF, the above bounden Surety has executed the instrument 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

Name

Title

Corporate Secretary (Seal)

Corporate Guarantor (Seal)

Name, Title & Address

FORM OF PERFORMANCE SECURITY (Bank Guarantee)

Date of the Performance Security: []	
Guarantee No. []	
Amount of this Performance Security: []	
Validity upto: []	
THIS DEDECORMANCE SECURITY is avacanted at [place I on this [I down f I month I I

THIS PERFORMANCE SECURITY is executed at [---place---] on this [---[day of [---month---] [---year---] by:

[---Name of the issuing Bank---] having its registered office at [---] (hereinafter referred to as the "Guarantor," which expression shall mean and include its successors, administrators and legal representatives, whether jointly or severally);

On the request and on behalf of [insert name of Lessor], a [company/firm] registered under the laws of Islamic Republic of Pakistan having its registered office at [•] (hereinafter referred to as the "Lessor" which expression shall mean and include its successors, executors, administrators and legal representatives, whether jointly or severally);

In favour of the [insert name of Lessee] (hereinafter referred to as the "Beneficiary," which expression shall mean and include its successors, administrators and legal representatives, whether jointly or severally).

WHEREAS:

To:

[Name of Lessee/Procuring Agency]

As required by the Beneficiary, the Guarantor, at the request and on behalf of Lessor, hereby furnishes this irrevocable, unconditional, without recourse, on demand bank guarantee (hereinafter referred to as the "**Performance Security**") in favour of the Beneficiary to secure the performance of the obligations of Lessor to design, supply, install and commission the System under and in accordance with the Contract Agreement dated [1].

NOW THEREFORE, this Performance Security witnesseth as under:-

- 1. In the event that Lessor defaults in, delays, or fails to design, supply, install and commission the System under and in accordance with the terms of the Contract Agreement of which the Beneficiary shall be the sole arbiter, the Guarantor as primary obligor and not as mere surety shall, on the Beneficiary's first written demand, pay to the Beneficiary by any method of payment acceptable to the Beneficiary, the entire sum of, or any portion demanded by it of the sum of [Rs.]. Such first written demand of the Beneficiary shall only state that the Lessor has defaulted in, or delayed, or failed to meet its obligations under the Contract Agreement. The decision of the Beneficiary as to Lessor's default, delay, or failure in the performance shall be final and unquestionable and Guarantor hereby irrevocably and expressly waives all rights to raise dispute or contestation in respect thereof.
- 2. The Guarantor's obligations as set out in this Performance Security shall be continuing obligations and demands hereunder may be made at any time and from time to time in accordance with its terms.
- 3. No set-off, counterclaim, reduction, or diminution of any obligation that the Guarantor has or may have against the Beneficiary shall be available to it against the Beneficiary in connection with any of its obligations to the Beneficiary under this Performance Security.

- 4. This Performance Security shall be governed by the laws of Pakistan and shall come into full force and effect on the date of its issuance by the Guarantor.
- 5. The Guarantor's maximum liability under this Performance Security is limited to the sum of [PKR _____]. This Performance Security shall expire at the official closing of the counters of the Guarantor, [---name of the Branch---] [---city-], on the [---] day of [---month----] [---year---]. The Guarantor's obligation under this Performance Security is limited to payment of claims lodged in writing and presented at the counters of the Guarantor, [---name of the Branch----] [---city---], on or before the expiry date, following which date, subject to any liability for claims presented on or before the expiry date, the Guarantor shall stand fully discharged and released from any and all obligations, claims and liabilities under this Performance Security whether or not this Performance Security is returned to the Guarantor.
- 6. No reference to any agreement, document or instrument herein shall be construed or deemed to incorporate herein by reference.
- 7. Capitalised terms not otherwise defined herein shall bear the meaning ascribed to them in the Contract Agreement.

For and on behalf of the Guarantor:
[To be signed by the authorized signatory(ies) of the Bank,
Dated and Stamped with the Bank's Stamp]

[Also to be witnessed by two adult male witnesses, specifying in each case, the full name, National Identity Card # if any, and address]

FORM OF BANK GUARANTEE (Bank Guarantee)

Guarantee No	
Executed on	
Expiry date	
[Letter by the Guarantor to the Lessor]	
Name of Guarantor with address: [insert name/address of the Bank]	
[Name of Procuring Agency/Lessee] (the "Principal Debtor") located at []	
Security Amount (express in words and figures)	
KNOW ALL MEN DV THESE DESENTS that in pursuance of the towns	of the Contract

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Contract Agreement dated [____] (the "Contract Agreement") and at the request of the said Principal Debtor, we, the Guarantor above named, are held and firmly and irrevocably and unconditionally bound unto the [name of the Lessor] (hereinafter called the Beneficiary) in the sum of the amount stated above for the payment of which sum well and truly to be made to the said Beneficiary, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

NOW THEREFORE, whenever the Principal Debtor during the Term delays, defaults or fails to pay quarterly Rental Payments when due and payable under and in accordance with the terms and conditions of the Contract Agreement, we, the [name of the Bank] with our registered office located at [] (the "Guarantor"), waiving all objections and defences, do hereby unconditionally and irrevocably and independently guarantee to pay to the Beneficiary without delay upon the Beneficiary's first written demand without cavil or arguments and without requiring the Beneficiary to prove or to show grounds or reasons for such demand, sum or sums up to the amount not paid by the Principal Debtor, against the Beneficiary's written declaration that the Principal Debtor has refused or failed to pay when due and payable under the Contract Agreement which payment will be effected by the Guarantor to Beneficiary's designated Bank & Account Number.

PROVIDED ALSO THAT the Beneficiary shall be the sole and final judge for deciding whether the Principal Debtor 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 amount that has remained unpaid by the Principal Debtor forthwith and without any reference to the Principal Debtor or any other person.

Capitalized terms not otherwise defined herein shall have meaning ascribed thereto in the Contract Agreement.

IN WITNESS WHEREOF, the above-bounden Guarantor has executed this Instrument 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.

For and on behalf of the Guarantor:
[To be signed by the authorized signatory(ies) of the Bank,
Dated and Stamped with the Bank's Stamp]

[Also to be witnessed by two adult male witnesses, specifying in each case, the full name, National Identity Card # if any, and address]

FORM OF CONTRACT AGREEMENT

] 2024 (the "Effective Date		s entered into at [] on this [] below (each a "Party" and collectively
	, 	T	T
Lessee:	Pakistan Railways	Lessor:	[Insert name of Lessor/Successful
Name and	Pakistan Kanways	Name and	Bidder]
Address		Address	Bluderj
Phone		Phone	
Fax		Fax	
E-mail		E-mail	
installation, transfer the G B. WH the most ad Lessor for the G C. WH entering into the conditions of leasing and "Project") addescribed in the exhibits part of this A Exh Exh Exh Exh Exh Exh Exh Ex	EREAS, in response to the vantageous evaluated has be development of the Project EREAS, pursuant to the to this Agreement with the Local REFORE, this Agreement of the design, finance, supply at the end of the Term to as more specifically described	eration, maintenance, le System at []the "Preserve Bidding Documents, been accepted and a Lect; and serms and conditions of essor. alongwith Exhibits attay, installation, testing, consider the On-Grid/ Hibed in Exhibit 2 to be served by reference and mand Conditions and Conditions and Conditions ent Agreement Guarantee mance Security acceptance rice Bid and Letter of Terreserved.	Bid/Proposal offered by Lessor being ter of Acceptance has been issued to a Letter of Acceptance, the Lessee is ached hereto set forth the terms and commissioning, operation, maintenance, by a Lessee's premises at [•] (the be installed at the Lessee's premises ade and read and construed as integral
Lessor:		Witne	sses:
•		By:	
NT		Name:	:
Title:		G) 17 G	:

Lessee:		
By:	 By:	
Name:	Name:	
Title:	CNIC:	

FORM OF EASEMENT AGREEMENT

This EASEMENT AGREEMENT (this "Agreement") is made and entered into this [●] day of [●], 20 (the "Effective Date"), by and between [insert name of the Procuring Agency/Lessee] ("Grantor"), and [insert name of the Successful Bidder/Lessor] ("Grantee").

Recitals

- A. Grantor is the owner of those certain [buildings, parcels or tracts of ground] located at [o], and more particularly described by metes and bounds on <u>Attachment A</u> attached hereto and incorporated herein (all of which [building, parcels or tracts of ground] are referred to herein as the "Premises").
- B. Grantor and Grantee entered into a certain Contract Agreement dated [1] (the "Contract Agreement") pursuant to which the Grantee has agreed to design, finance, supply, construct, install, commission, operate, maintain and at the end of Term transfer the Systems (as defined in the Contract Agreement on the Premises for the purpose of providing electric energy to the facility(ies) (the "Facility(ies)") located on the Premises.
- C. Grantor desires to grant to Grantee the rights described herein for the purposes mentioned above.

Agreement

NOW, THEREFORE, in consideration of the foregoing, the mutual covenants and agreements set forth below, and other good and valuable consideration, receipt and sufficiency of which is hereby acknowledged and confirmed by Grantor, Grantor and Grantee hereby agree as follows:

- 1. Grant of Easement. Grantor hereby grants and conveys unto Grantee, its successors and assigns, a non-exclusive easement for the period of time set forth herein, across, over, under and above each Facility in order to construct, install, alter, protect, repair, maintain, replace, operate, maintain the System, including any related interconnection equipment and any facilities or equipment appurtenant thereto as Grantee may from time to time require. Grantor also hereby grants and conveys unto Grantee all other easements across, over, under and above each Facility as reasonably necessary to provide access to and services reasonably required for Grantee's performance under the Contract Agreement. The easements granted hereunder shall run with and burden each Facility for the term of this Agreement.
- 2. <u>Term.</u> This Agreement shall remain effective for a period commencing on the Effective Date and shall expire upon earlier of (a) one month following the expiration of the Term of the Contract Agreement, and (b) earlier termination of the Contract Agreement due to default by Grantee thereunder. No delay or interruption by Grantee in the use or enjoyment of any right or easement hereby granted shall result in the loss, limitation or abandonment of any of the right, title, interest, easement or estate granted hereby.
- 3. Obstructions. In addition to the rights afforded Grantee under the Contract Agreement, Grantee may from time to time remove structures, trees, bushes, or other obstructions within such portions of the Premises, and may level and grade such portions of the Facility, to the extent reasonably necessary to carry out the purposes set forth herein; provided that Grantor gives its prior written consent to such removal, leveling or grading, such consent not to be unreasonably withheld, delayed or conditioned. Grantor covenants for itself, its heirs, successors and assigns that:

- a. Grantor will not build or place, or allow to be built or placed, any structure or obstruction of any kind within such portions of each Facility on which is located any portion of the relevant System, including any related interconnection equipment; and
- b. if such a structure or obstruction is built or placed within any portion of a Facility on which is located any portion of the System, including any related interconnection equipment, Grantor will remove the same at the request of the Grantee at no cost to the Grantee. Grantee may erect a fence on such portions of the Facility or a Facility on which any portion of the System, are located in order to exclude Grantor and others from accessing such areas provided that Grantor gives its prior written consent, such consent not to be unreasonably withheld, delayed or conditioned.
- 4. Reservation of Rights. Grantor reserves the right to use or authorize others to use the Premises and each Facility in any manner not inconsistent with or which will not unreasonably interfere with the rights granted herein, provided, however, that Grantor shall not, nor shall permit others to, disturb the System, including any related interconnection equipment, in any way without prior written approval of the Grantee.
- 5. Title. Grantor represents and warrants to Grantee that (a) Grantor holds free simple title to the Premises, free and clear of all liens and any other encumbrances, and (b) no lien or other encumbrance to which the Premises is subject would reasonably be expected to adversely impact Grantee's rights hereunder or under the Contract Agreement. Grantor further represents and warrants to Grantee that Grantor has the right to execute and deliver this Agreement and to grant to Grantee the easements and other rights hereunder, and that such grant does not, and will not, violate or breach Grantor's organizational documents, any law, rule or regulation, or any contract, agreement or arrangement to which Grantor is a party or by or to which any of Grantor's assets or properties, including the Premises or a Facility, is bound or subject. In the event that, after the date of this Agreement, Grantor duly grants a mortgage for additional value (the "Subsequent Mortgage"), Grantor shall, prior to and as a condition to the effectiveness of such grant of a mortgage, cause the mortgagee under the Subsequent Mortgage to execute and deliver to the Grantee an agreement, in customary form and in form and substance reasonably acceptable to Grantee, acknowledging the subordination of the Subsequent Mortgage to the grant of the easement pursuant to this Agreement (the "Subordination Agreement").
- 6. Registration; Possession. If so required under the laws of Pakistan, this Agreement shall be registered against the Premises by Grantee at Grantee's sole cost and expense. Grantor covenants and agrees, for itself and its assigns and successors, that the Grantee shall be entitled to exercise its rights under this Agreement only upon execution and delivery of this Agreement by the Parties hereto, and when this Agreement is duly registered, if required by applicable laws of Pakistan.
- 7. Governing Law. This Agreement shall be governed by, and interpreted and construed in accordance with, the laws of Pakistan.
- 8. <u>Severability</u>. All provisions of this Agreement are severable and the invalidity or unenforceability of any provision shall not affect or impair the validity or enforceability of the remaining provisions.
- 9. **Binding Effect; Successors and Assigns**. Grantee shall have the right to assign, apportion, or otherwise transfer any or all of its rights, benefits, privileges, and interests arising in this Agreement in accordance with the terms of the Contract Agreement. Without limiting the generality of the foregoing, the rights and obligations of the Parties

shall inure to the benefit of and be binding upon their respective successors and assigns. This Agreement may be amended, modified or terminated only by written instrument, executed and acknowledged by the Parties hereto.

- 10. <u>Headings.</u> The headings used herein are for convenience only and are not to be used in interpreting this Agreement.
- 11. <u>Entire Agreement.</u> This Agreement contains the entire agreement of the Parties with respect to the subject matter hereto and supersedes any prior written or oral agreements with respect to the matters described herein.
- 12. <u>Counterparts.</u> This Agreement may be executed in counterparts, each of which shall be deemed the original, but which together shall constitute one and the same instrument.

[signature pages follow]

	WHEREOF, this Easement Agreement has been executed and delivered is day of, 2022.
GRANTOR:	
By: Print Name: Title:	
GRANTEE:	
By: Print Name: Title:	



CONDITIONS OF CONTRACT Basic Terms and Conditions

- 1. Lessor's Obligation: Lessor shall design, finance, supply, install, test, commission, own, operate, maintain, lease and at the end of the Term, transfer the System to the Lessee under and in accordance with the terms and conditions of Contract Agreement and applicable laws of Pakistan.
- 2. Power Generated by System: Notwithstanding anything contained in Contract Agreement, during the Term, all electric power generated by the System shall be in the exclusive ownership of and for use by Lessee.
- **3.** Lease Term: Ten (10) Contract Years, beginning from the Commercial Operation Date (the "Term") provided however, the Lease Term may be extended pursuant to a Force Majeure event hereunder affecting Lessor.
- **4.** Payment Terms: Subject to any adjustment in respect of Guaranteed Annual Energy Yield of each Site, the lease rental, in the sum of PKR based on the Annual Lease Rental for each respective Site specified in the Schedule of Prices under the Contract Agreement, shall be paid quarterly (the "Quarterly Lease Rental") based on the following formula:

$$Quarterly\ Lease\ Rental\ = \frac{Annual\ Lease\ Rental}{4} \times \left(0.7 + 0.3 \times \frac{CPI_{q-1}}{CPI_{Ref}}\right)$$

Where

- CPI_{q-1} is the average of the end-of-month values for the National Consumer Price Index (CPI) (General), as published by the Pakistan's Federal Bureau of Statistics, in the quarter immediately preceding the relevant quarter for which Quarterly Lease Rental is due. This is calculated as the sum of the month-end National CPI (General) values in the quarter for which the Quarterly Lease Rental is due, divided by the number of such values. However, if any values for any month in that quarter are unavailable, the average of the end-of-month values for the most recent three (3) months, for which data is available, shall be used.
- CPI_{ref} is the National Consumer Price Index (General) as published by Pakistan's Federal Bureau of Statistics for the month immediately preceding the deadline for the submission of bids.

The Quarterly Lease Rental will be paid in advance by starting from the Commercial Operations Date until eight (8th) anniversary of Commercial Operations Date provided, however, starting from the nith (9th) Contract Year of the Term, the Quarterly Lease Rental shall be paid in arrears.

Quarterly Lease Rental shall be paid within twenty-one (21) days of submission of corresponding payment invoice by Lessor.

5. Bank Guarantee: Simultaneously with the execution of the Contract Agreement, Lessee shall procure from a Schedule Bank in Pakistan and post an unconditional, irrevocable, non-recourse, revolving bank guarantee in the form of **Exhibit 5** to the Contract Agreement, amounting to two (02) quarters' lease rental. In case of failure or delay by Lessee to make any payment under the

Contract Agreement by the due date, Lessor subject to other remedies available under the Contract Agreements, shall have the right to encash the Bank Guarantee to recover such unpaid amounts. In case, the Bank Guarantee is encashed by the Lessor, the Lessee shall procure a new Bank Guarantee on the same terms and conditions as set forth in this Clause and in the form of **Exhibit 5.**

- **6. Transfer Obligations:** Immediately after the expiry of the Term (or any extended period under Force Majeure), Lessor shall transfer and Lessee shall purchase the System alongwith all relating rights, interests, titles, licenses, warranties, permits, machinery, equipment, tools, manuals, computer programs and other applications to the Lessee against consideration of Re.1 as more specifically described in Section 9 of **Exhibit 3.**
- 7. Guaranteed Annual Energy Yield: Lessor guarantees that the Systems installed at each Site as per design specifications in Exhibit 2, subject to maximum degradation of one half percent (0.5%) per year of solar panels of each System and the terms and conditions of the Contract Agreement, shall produce minimum energy annually stipulated in Schedule of Prices, as shown by the inverter(s) of the System installed at that Site and verified through real time data logged under a cloud based server maintained by the Lessee (the "Guaranteed Annual Energy Yield").
- **7A.** Deemed Annual Energy Yield: The annual energy produced by the System(s) shall be subject to adjustment for events where the System(s) does not produce energy solely due to failure or non-availability of Lessee's distribution system(s) / grid power supply of relevant DISCO not caused by the System(s) or attributable to any Lessor's acts of omission or commission (the "Deemed Annual Energy Yield") and will be computed based on the following formula:

$$DAEY = AEP + END$$

Where

- DAEY is the Deemed Annual Energy Yield for the System installed at the specific Site
- AEP is the actual energy produced by the System during the relevant Contract Year as shown in the Invertor of the System for that Site and verified through real time data logged under a cloud based server maintained by the Lessee.
- END is the annual energy not delivered by the System solely due to the failure or non-availability of the Lessee's distribution system / grid power supply of relevant DISCO. For the purpose of calculating END, only those events occurring from 6:00 am to 6:00 pm, during which the duration of the failure or non-availability of the distribution system exceeds fifteen (15) minutes, shall be taken into account. It is important to note that END shall exclude power failure events falling under Force Majeure, autonomous shutdown of equipment, or reduced energy output due to environmental factors such as weather conditions etc. and will be computed using the following formula:

$$END = \left(0.45 \times CR \times \sum_{i=1}^{i=N} \frac{X_i}{60}\right) - DAEP_i$$

Where

- CR is the Committed Rating (in kWp at STC) of the System installed at the specific Site
- X is the total number of minutes during each event in which distribution system / grid power system of relevant DISCO is not available.
- i is the number of events of failure or non-availability of the distribution system / grid power system of relevant DISCO, occurring from 06:00 am to 06:00 pm, each having duration of 15 minutes or more, during the relevant Contract Year
- N represents the total number of events of failure or non-availability of the distribution system / grid power system of relevant DISCO, occurring from 06:00 am to 06:00 pm, each having duration of 15 minutes or more, during the relevant Contract Year
- DAEP is the actual energy produced during the event through genset synchronization and / or battery backup as shown in the Invertor of the System for that Site and verified through real time data logged under a cloud based server maintained by the Lessee

Note: If energy not delivered for any event works out to be negative, it will be considered as zero.

7B. Adjustment of Lease Rental: If the Deemed Annual Energy Yeild falls short of the Guaranteed Annual Energy Yield for any Site at the end of relevant Contract Year, the amount of lease rentals for that Facality shall be adjusted pro-rata and Lessee shall have right to first set-off such adjusted amount from the lease rentals due and payable in the next Contract Year, provided, however, in the tenth (10th) Contract Year, the Lessee in addition to any adjustment of previous Contract Year shall also have the right to set-off such adjustment at the end of each quarter of the tenth (10th) Contract Year.

Example: assuming the Annual Lease Rental for a Site, as per Schedule of Prices, is PKR 26 million and the Lessor has guaranteed, in the Schedule of Prices, a minimum annual energy yield of 750,000 kWh for that Site with Committed Rating of 500 kWp. The annual energy produced in the third Contract Year as recorded by the Inverter of that Site is 740,000 kWh. During the Contract Year, there were 4 events where the energy could not be delivered by the System solely due to the failure or non-availability of the Lessee's distribution system / power grid system, as described below:

	Event No.	Event Start	Event End	Event Duration (minutes)	Actual Energy Produced during the Event
	1	11:05 am	11:15 am	10	35 kWh
	2	04:00 am	05:55 am	115	15 kWh
	3	12:05 pm	03:10 pm	185	220 kWh
J	4	09:00 am	01:55 pm	295	1110 kWh

Now in this case, the Guaranteed Annual Energy Yield for the 3^{rd} Contract Year works out to be 750,000 kWh $-0.5\% \times 2$ years \times 750,000 kWh = 742,500 kWh whereas Annual Energy Produced (AEP) is 742,000 kWh. The Energy Not Delivered (END) and the Deemed Annual Energy Yield (DAEY) are calculated as under:

Event No. 1

Since the event duration does not exceed 15 minutes, this event is not considered for the purpose of calculating END.

Event No. 2

Since the event did not occur from 06:00 am to 06:00 pm, this event is not considered for the purpose of calculating END.

Event No. 3

$$X_3 = \frac{185}{60} = 3.08 \ hours$$

$$END_3 = (0.45 \times CR \times X_3) - DAEP_3$$

$$END_3 = \left(0.45 \times 500 \times \frac{185}{60}\right) - 220 = 473.75 \, kWh$$

Event No. 4

$$END_4 = (0.45 \times CR \times X_4) - DAEP_4$$

$$END_4 = \left(0.45 \times 500 \times \frac{295}{60}\right) - 1110 = -3.75 \, kWh$$

Since energy not delivered during this event works out to be negative, it is taken as zero i.e. $END_4 = 0$

Now

$$END = 0 + 0 + 473.75 + 0$$

$$END = 473.75 \; kWh$$

$$DAEY = AEP + END = 740,000 + 473.75$$

$$DAEY = 740,473.75 \text{ kWh}$$

Since during this Contract Year, DAEY falls short of GAEY by an amount of (742,500-740,473.75 kWh=2026.25 kWh), the amount of lease rentals for that Site for the 3rd Contract Year shall be adjusted on pro-rata as per following:

$$Lease\ Rental\ for\ 3rd\ Contract\ Year = PKR\ 26\ million - \frac{2026.25\ kWh}{742,500\ kWh} \times PKR\ 26\ million$$

Lease Rental for 3rd Contract Year = PKR 25.929 million

- **8.** Excess Energy: For each Site of the Project, all energy produced by the System in excess of Guaranteed Annual Energy Yield for that Site shall be utilized by Lessee without any further payment.
- 9. Performance Security: Within a period of fifteen (15) days after the receipt of Letter of Acceptance, in order to secure its obligations to timely install and commission the System by the Scheduld Commercial Operation Date, Lessor shall post an irrevocable, unconditional, without recourse on demand bank guarantee to be issued by a scheduled bank in Pakistan in form of Exhibit 6 to the Contract Agreement in the amount of Pakistani Rupees equivalent to the amount as provided in the Contract Data which guarantee shall provide for draws by Lessee in immediately available funds upon presentation on weekly basis. The Performance Security shall have validity as given in the Contract Data. In case Lessor fails or delays to install and commission the System at any Facility by the Scheduled Commercial Operation Date, Lessee shall be entitled to encash the Performance Security equivalent to the amount as provided in the

Contract Data for each day of delay at that Facility (the "Liquidated Damages"); provided, however, in case Lessor fails to achieve the Commercial Operation Date within six (6) months from Scheduled Commercial Operation Date, in addition to other remedies available to Lessee under the Agreement, Lessee shall be entitled to encash the Performance Security in full. The Parties agree that the amounts so encashed under the Performance Security are the Parties' reasonable and genuine estimates for the actual damages and/or losses that may reasonably be anticipated from such failures or delays in respect of such matters, and do not constitute a penalty.

- 10. Condition Satisfaction Date: the date as provided in the Contract Data.
- 11. Scheduled Commercial Operation Date: the date as provided in the Contract Data.
- **12. Contract Year:** A period of twelve (12) consecutive months commencing on each consecutive anniversary of the Commercial Operation Date and ending as of the end of the day preceding the next anniversary of the Commercial Operation Date, except for the first Contract Year which shall start on the Commercial Operation Date.

13. Other conditions to be complied with by the Lessor for each Facility are as follows:

- (i) All works required for proper installation of the Systems including necessary civil works for mounting structures of solar module, shall be done by the Lessor;
- (ii) All necessary electrical wiring from existing electrical distribution box up to Power Conditioning Unit (PCU) of the System and back from PCU to distribution box shall have to be done by the Lessor including supply of all required materials. The wiring shall have to be done in concealed conduits;
- (iii) After completion of the proposed works, clearances of all temporary works/ materials shall be the sole responsibility of the Lessor and this shall be removed immediately after the requirement of such temporary work is completed;
- (iv) General aesthetics & cleanliness in regard to the installation of various systems shall have to be maintained in accordance with the aesthetics of the Facility;
- (v) Arrangement of proper earthing mechanism and lightening arresters shall be done at Facility as per the requirements of the System;
- (vi) Warrantee, Operation and Maintenance 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, Operation and Maintenance period shall be the property of the Lessor;
- (vii) Three months prior to expiry of the Term, the Lessor will conduct on-Facility training of the purchaser's/ user's personnel regarding assembly, start-up, operation, maintenance and repairs of the System;
- (viii) Rectification of all the defects developed in the System during Warrantee, Operation and Maintenance period shall have to be done by the Lessor promptly;
- (ix) During Warrantee, Operation and Maintenance period, the Lessor shall have to submit annual performance & functionality report based on the collected data. The Lessee will share the data with the Lessor in this regard; &

(x) During the Warrantee, Operation and Maintenance period, Lessee will have all the rights to cross check the performance of the System. Lessee 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, Lessee will take the necessary action to recover the losses and to black list the Lessor and the same may be communicated to AEDB and other nodal agencies. The decision of Lessee in this regard will be final and binding on the Lessor.

14. Contractors/Sub-Contractors

The Lesssor may subject to terms of the Contract Agreement appoint Contractor(s)/Sub-Contractor(s), and the Sub-Contract(s) shall be subject to the same term and conditions of Contract Agreement. Overall responsibility of all Project, whether parts of it subcontracted or not, shall rest with the Lessor.

15. Independent Engineer

"Independent Engineer" means a firm of engineering consultants named in the Contract Data to be hired by the Lessor in accordance with the specified terms herein. The purpose of this appointment is to observe the installation and testing of the Systems and to certify to both the Lessee and the Lessor that the Systems are complete in accordance with the minimum technical design specifications provided in the Contract Agreement. The Independent Engineer shall have broad responsibilities, including:

- Review of pre-shipment factory inspection and testing documents/certificates of solar PV modules and inverters prior to their delivery at the Facility
- Inspection of equipment/material upon delivery at the Facility to ensure compliance with the specifications provided in the Contract Agreement.
- Verification of equipment installation.
- Provision of a certificate attesting to the completion of the Systems in accordance with the minimum technical design specifications.

The Independent Engineer shall be engaged by the Lessor within one (1) month from the Effective Date. The Lessor shall bear sole responsibility for the payment of fees and expenses to the Independent Engineer at the rate stipulated in the Contract Data. The lease rentals quoted in the Schedule of Prices by the Lessor are considered to include all such payments to be made to the Independent Engineer pursuant to this Contract Agreement.

CONDITIONS OF CONTRACT

General Terms and Conditions

- 1. <u>Definitions and Interpretation:</u> Unless otherwise defined or required by the context in which any term appears: (a) the singular includes the plural and vice versa; (b) the words "herein," "hereof" and "hereunder" refer to the Contract Agreement as a whole and not to any particular section or subsection of the Contract Agreement; (c) references to any agreement, document or instrument mean such agreement, document or instrument as amended, modified, supplemented or replaced from time to time; and (d) the words "include," "includes" and "including" mean include, includes and including "without limitation." The captions or headings in the Contract Agreement are strictly for convenience and shall not be considered in interpreting the Contract Agreement. The capitalized terms not otherwise defined in **Exhibit 3** of the Contract Agreement shall have meaning ascribed thereto in the Contract Agreement or other Exhibits, as the case may be.
- 2. <u>Lease of Solar Equipment:</u> Lessor agrees to lease to Lessee, and Lessee agrees to lease from Lessor, the Systems more specifically described in **Exhibit 2** to the Contract Agreement.
- 3. <u>Lease Term:</u> The Term shall commence from the date when both of the following conditions are satisfied (the "Commercial Operation Date"):
 - <u>a)</u> The Independent Engineer provides Lessee with written certification duly copied to Lessor, stating that the Systems are mechanically complete in accordance with the minimum technical design specification outlined in the Contract Agreement; and
 - <u>b)</u> The net metering licenses or distributed generation license, as identified in **Exhibit 2**, for the Sites have been obtained by the Lessor.

The Term shall continue, unless earlier terminated as outlined for in the Contract Agreement, until the end of the period stated in **Exhibit 1** to the Contract Agreement.

- 4. Rent, Payment Terms and Taxes: Rent: Lessee shall pay Lessor for the use of the Systems at the rate and intervals shown in Exhibit 1 ("Rent") of the Contract Agreement.
 - **Quarterly Invoices:** Lessor shall invoice Lessee quarterly starting from the Commercial Operations Date, stating (i) the Rent due, (ii) any additional charges incurred by Lessee under the Contract Agreement. Lessee's obligation to timely pay amounts due under the Contract Agreement shall not be affected by the failure of Lessor to issue an invoice or any inaccuracy in any invoice.
 - **Taxes:** Subject to Change in Law protection under the Contract Agreement, Lessor shall be exclusively responsible to pay any and all taxes assessed including but not limited to on the lease of the System, the delivery or consumption of electric energy produced by the Systems or the interconnection of the Systems to the electric distribution system(s).
 - c. <u>Delayed Payment</u>: All amounts due under the Contract Agreement if not paid within fifteen (15) days of the due date, shall accrue interest at the average "ask side" Karachi Interbank Offer Rate (KIBOR) for PKR deposits plus one (01) bps.

5. Conditions to Obligations:

- a. <u>Commencement of Construction</u>: Lessor's obligation to commence construction and installation of the System is conditioned on Lessor's receipt of (A) approval from relevant DISCO and/or NEPRA, if required, for installation of System and its connection with distribution system; and (B) a signed original copy of the easement agreement substantially in the form attached as <u>Exhibit 4</u> (the "Easement Agreement") of the Contract Agreement.
- b. <u>Failure of Conditions:</u> If any of the conditions listed in Section 5(a) are not satisfied by the Condition Satisfaction Date, the Parties will attempt in good faith to negotiate new dates for the satisfaction of the failed conditions. If the Parties are unable to negotiate new dates then Lessor may terminate the Contract Agreement upon ten (10) days written notice to Lessee without liability for costs or damages or triggering a default under the Contract Agreement.

6. Lessor's Rights and Obligations:

- **a. Permits and Approvals:** Lessor, with Lessee's reasonable cooperation, shall use commercially reasonable efforts to obtain, at its sole cost and expense:
 - i. any zoning, land use and building permits required to construct, install and operate the Systems; and
 - ii. any agreements and approvals from the [relevant Distribution Company(ies) and or NEPRA] necessary in order to interconnect the Systems to the [relevant Distribution Company(ies)]'s electric distribution system(s). Lessee shall cooperate with Lessor's reasonable requests to assist Lessor in obtaining such agreements, permits and approvals.
- b. Standard System Repair and Maintenance: Lessor shall construct and install the System at each Facility. During the Term, Lessor will operate and perform all routine and emergency repairs to, and maintenance of, the Systems at its sole cost and expense, except that Lessee shall reimburse Lessor for the cost of any repairs or maintenance resulting from Lessee's negligence, willful misconduct or breach of the Contract Agreement. Lessor shall not be responsible for any work done by others on any part of the System unless Lessor authorizes that work in advance in writing. Lessor shall not be responsible for any loss, damage, cost or expense arising out of or resulting from improper environmental controls or improper operation or maintenance of the Systems by anyone other than Lessor or Lessor's contractors. If the System requires repairs for which Lessee is responsible, Lessee shall pay Lessor for diagnosing and correcting the problem at Lessor or Lessor's contractors' then current standard rates. Lessor shall provide Lessee with reasonable notice prior to accessing each Facility to make standard repairs.
- **Suspension:** Notwithstanding anything to the contrary in the Contract Agreement, Lessor shall be entitled to suspend operation of the System(s) for the purpose of maintaining and repairing the System(s) and such suspension of operation shall not constitute a breach of the Contract Agreement; provided, that Lessor shall use commercially reasonable efforts to minimize any interruption in operation to the Lessee.

- d. <u>Use of Contractors and Sub-Contractors:</u> Lessor shall be permitted to use Contractors and Sub-Contractors to perform its obligations under the Contract Agreement, provided however, that (a) the aggregate amount of the works subcontracted shall not exceed 40% of the works as contemplated in the Contract Agreement; and (b) such Contractors and Sub-Contractors shall be duly licensed/registered under applicable laws and shall provide any work in accordance with applicable industry standards. Notwithstanding the foregoing, Lessor shall continue to be responsible for the quality of the work performed by its Contractors and Sub-Contractors.
- e. <u>Quiet Enjoyment</u>: Lessor will not disturb Lessee's quiet enjoyment of the System(s) during the Term unless a Default Event has occurred and is continuing under the Contract Agreement; provided, however, that Lessor shall have the right to access the System(s) to perform Lessor's obligations under the Contract Agreement.
- **Security:** Lessee shall be responsible for maintaining the physical security of each System installed at the Facilit(ies). Lessee will also not conduct activities on, in or about the Premises or the Facility(ies) that have a reasonable likelihood of causing damage, impairment or otherwise adversely affecting the System(s).

7. <u>Lessee's Rights and Obligations</u>:

- License to the Premises; Facility Access Rights: Lessee hereby grants to Lessor and to Lessor's agents, employees, contractors and assignees an irrevocable non-exclusive license running with the Premises (the "License") for access to, on, over, under and across the Premises for the purposes of (i) installing, constructing, operating, owning, maintaining, accessing, removing and replacing the System(ies); (ii) performing all of Lessor's obligations and enforcing all of Lessor's rights set forth in the Contract Agreement; and (iii) installing, using and maintaining electric lines and equipment, including inverters and meters necessary to interconnect the System to Lessee's electric system at the Facility, to the Distribution Company's electric distribution system, if any, or for any other purpose that may from time to time be useful or necessary in connection with the construction, installation, operation, maintenance or repair of the System. Lessor shall notify Lessee prior to entering any Facility except in situations where there is imminent risk of damage to persons or property. The term of the License shall continue until the date that is thirty (30) days following the date of expiration or termination of the Contract Agreement (the "License Term"). During the License Term, Lessee shall ensure that Lessor's rights under the License and Lessor's access to the Premises and the Facility(ies) are preserved and protected. Lessee shall not interfere with nor shall permit any third parties to interfere with such rights or access. The grant of the License shall survive termination of the Contract Agreement by either Party.
- **Receipt and Use of Electricity:** Lessee shall be entitled to take delivery of all of the electric energy generated by the Systems during the Term. During the Term, Lessor shall be responsible for delivering to the relevant Distribution Company(ies) any electric energy generated by the System(s) that is in excess of Lessee's electric requirements at the time of delivery.

- c. <u>Compliance with Safety Laws and Codes</u>: Both parties shall ensure that all requirements of applicable safety laws or codes are adhered to in their performance under the Contract Agreement.
- d. Maintenance of Facilities: Lessee shall, at its sole cost and expense, maintain the Facilities in good condition and repair. Lessee will ensure that each Facility remains interconnected to the relevant Distribution Company's electric distribution system at all times and will not cause cessation of electric service to the Facility from the relevant Distribution Company. Lessee is fully responsible for the maintenance and repair of each Facility's electrical system and of all of Lessee's equipment that utilizes the System's outputs. Lessee shall properly maintain in full working order all of Lessee's electric supply or generation equipment that Lessee may shut down while utilizing the System(s). Lessee shall promptly notify Lessor of any matters of which it is aware pertaining to any damage to or loss of use of the System(s) or that could reasonably be expected to adversely affect the System(s).
- Possible for all damage to the System caused by Lessee or its contractors. To the extent that temporary disconnection or repairs, such work and any Facility is necessary to perform such alterations or repairs, such work and any Facility is necessary to perform such alterations or repairs, shall be done in a good and workmanlike manner and in compliance with all applicable laws, codes and permits.
- f. Insolation: Lessee understands that unobstructed access to sunlight ("Insolation") is essential to Lessor's performance of its obligations and a material term of the Contract Agreement. Lessee shall not in any way cause and, where possible, shall not in any way permit any interference with each System's Insolation. If Lessee becomes aware of any activity or condition that could diminish the Insolation of the System, Lessee shall notify Lessor immediately and shall cooperate with Lessor in preserving the System's existing Insolation levels.
- **Data Line:** Lessee shall arrange a high speed internet data line during the Term to enable Lessor to efficiently operate and record the electric energy generated by the System.
- 8. <u>Change in Law:</u> "Change in Law" means (i) the enactment, adoption, promulgation, modification or repeal of any applicable law or regulation after Commercial Operation Date; or (ii) the imposition of any material conditions on the issuance or renewal of any applicable permit after the Commercial Operation Date (notwithstanding the general requirements

contained in any applicable Permit at the time of application or issue to comply with future laws, ordinances, codes, rules, regulations or similar legislation), which in the case of any of (i) or (ii), establishes requirements affecting owning, operating or maintaining the System(s), or other performance of the Lessor's obligations hereunder and which has a material adverse effect on the cost to Lessor of performing such obligations; provided that a change in federal, provincial or any other tax law(s) except related to indirect taxes after the Commercial Operation Date shall not be a Change in Law. If any Change in Law occurs that has a material adverse effect on the cost to Lessor of performing its obligations under the Contract Agreement, then the Parties shall, within thirty (30) days following receipt by Lessee from Lessor of notice of such Change in Law, meet and attempt in good faith to negotiate amendments to the Contract Agreement as are reasonably necessary to preserve the economic value of the Contract Agreement to both Parties. If the Parties are unable to agree upon such amendments within such thirty (30) day period, then Lessor shall have the right to invoke Clause 18 (b) of Conditions of Contract.

9. Transfer and Purchase of the Project (Systems) after Expiry of Term: Six months prior to the end of the Term, Lessor shall at its sole cost and expense, provide to Lessee a report by an independent and qualified engineer or engineering consulting firm, selected by Lessee, certifying that as of the date of the report, the Systems are in the good condition with warranties intact for PV modules. Additionally, it will assess the state of repair and maintenance of the Systems. In the event of any discrepancies and/or deficiencies identified, the report shall include a cost estimate for the necessary remedial work. The Lessor, at its sole cost and expense, but no later than the transfer date, shall address and rectify all such discrepancies and/or deficiencies. This also includes, without limitation, deficiencies in the spare parts inventory at each Facility, consistent with prudent utility practices for a solar PV system of a similar type to the System.

Six months prior to the end of the Term, the Lessee shall engage its representative / O&M contractor. This representative shall liaise closely with the Lessor and monitor the progress of repair works and confirm to the Lessee that the recommendations of the independent engineer are being followed. Project related documents including warranties, diagrams, design and O&M manual etc. shall be shared by the Lessor with the Lessee as well.

Upon expiry of the Term, Lessor shall transfer, free of all liens and encumbrances, and Lessee shall purchase the Systems alongwith all associated rights, interests, titles, licenses, permits, machinery, equipment, tools, manuals, computer programs and other applications to Lessee against consideration of One Rupee (Re.1).

10. <u>Default, Remedies and Damages:</u>

a. <u>Default:</u>

Any Party that fails to perform its responsibilities as listed below or experiences any of the circumstances listed below shall be deemed to be the "**Defaulting Party**", the other Party shall be deemed to be the "**Non-Defaulting Party**", and each event of default shall be a "**Default Event**":

- i. failure of a Party to pay any amount due and payable under the Contract Agreement, other than an amount that is subject to a good faith dispute, within thirty (30) days following receipt of written notice from the Non-Defaulting Party of such failure to pay ("Payment Default");
- ii. failure of a Party to substantially perform any other material obligation under the Contract Agreement within thirty (30) days following receipt of written notice from the Non-Defaulting Party demanding such cure; provided, that such thirty (30) day cure period shall be extended (but not beyond ninety (90) days) if and to the extent reasonably necessary to cure the Default Event, if (A) the Defaulting Party initiates such cure within the thirty (30) day period and continues such cure to completion and (B) there is no material adverse effect on the Non-Defaulting Party resulting from the failure to cure the Default Event;
- iii. if any representation or warranty of a Party proves at any time to have been incorrect in any material respect when made and is material to the transactions contemplated hereby, if the effect of such incorrectness is not cured within thirty (30) days following receipt of written notice from the Non-Defaulting Party demanding such cure;
- iv. Lessee loses its rights to occupy and enjoy the Premises;
- v. a Party becomes insolvent or is a party to a bankruptcy, reorganization, insolvency, liquidation, receivership, dissolution, winding-up or relief of debtors, or any general assignment for the benefit of creditors or other similar arrangement or any event occurs or proceedings are taken in any jurisdiction with respect to the Party which has a similar effect, and, if any such bankruptcy or other proceedings were initiated by a third party, if such proceedings have not been dismissed within sixty (60) days following receipt of a written notice from the Non-Defaulting Party demanding such cure; or
- vi. Lessee prevents Lessor from installing the System(s) or otherwise failing to perform in a way that prevents the delivery of electric energy from the System. Such Default Event shall not excuse Lessee's obligations to make payments that otherwise would have been due under the Contract Agreement.

b. Remedies:

- i. Remedies for Payment Default. If a Payment Default occurs, the Non-Defaulting Party may suspend performance of its obligations under the Contract Agreement. Further, the Non-Defaulting Party may (A) at any time during the continuation of the Default Event, terminate the Contract Agreement upon fifteen (15) days prior written notice to the Defaulting Party, and (B) pursue any remedy under the Contract Agreement, at law or in equity, including an action for damages.
- ii. Remedies for Other Defaults. On the occurrence of a Default Event other than a Payment Default, the Non-Defaulting Party may (A) at any time

during the continuation of the Default Event, terminate the Contract Agreement or suspend its performance of its obligations under the Contract Agreement, upon fifteen (15) days prior written notice to the Defaulting Party, and (B) pursue any remedy under the Contract Agreement, at law or in equity, including an action for damages.

- iii. Damages Upon Termination by Default. Upon a termination of the Contract Agreement by the Non-Defaulting Party as a result of a Default Event by the Defaulting Party, following provisions shall apply:
- A. Lessee: If Lessee is the Defaulting Party and Lessor terminates the Contract Agreement, Lessor at the option of Lessee, will be entitled to either (i) remove all of its tangible property comprising the Systems from the Facilities on a mutually convenient date provided excluding ordinary wear and tear, the Facilities shall be returned to its original condition including the removal of Systems mounting pads or other support structures and receive from Lessee the Termination Payment which shall be equal to (a) one fifth of remaining lease rentals to be paid over the Term post-termination, had the Term remained effective for the full Term and (b) any and all other amounts previously accrued under the Contract Agreement and then owed by Lessee to Lessor or (ii) (a) receive from Lessee a Termination Payment which shall be equal to cost of the System to be calculated as [Pak Rupees One Hundred Forty Thousands (PKR 140,000) per kW], reduced on straight line basis over the period of the Term plus one fifth of the remaining lease rentals to be paid over the Term post-termination, had the Term remained effective for the full Term and (b) any and all other amounts previously accrued under the Contract Agreement and then owed by Lessee to Lessor and simultaneously with the payment of Termination Payment by Lessee under option (ii) above, Lessor shall transfer the Systems alongwith all relating rights, interests, titles, licenses, warranties, permits, machinery, equipment, tools, manuals, computer programs and other applications (the "Transferable System") to Lessee and Lessor shall not have no further rights, interest or title to the Transferable Systems provided, however, Lessor shall continue to be liable for all the warranties of the System as set out in Exhibit 1. The Parties agree that actual damages to Lessor in the event the Contract Agreement terminates prior to the expiration of the Term as the result of a Default Event by Lessee would be difficult to ascertain, and the applicable Termination Payment is a reasonable approximation of the damages suffered by Lessor as a result of early termination of the Contract Agreement.
- **B.** <u>Lessor:</u> If Lessor is the Defaulting Party and Lessee terminates the Contract Agreement, Lessee shall have the option to either (i) cause Lessor to remove all tangible property comprising of Systems (except for mounting pads and support structures) from each Facility on the Lessor's sole expense and cost, at mutually convenient date and upon full and complete removal of the Systems the Parties

shall have no further rights and obligations against each other under the Contract Agreement or (ii) require Lessor to transfer to Lessee the Systems alongwith all relating rights, interests, titles, licenses, warranties, permits, machinery, equipment, tools, manuals, computer programs and other applications and simultaneously pay to Lessor fifty percent (50%) of the cost of the Systems to be calculated as Pak Rupees One Hundred Forty Thousands (PKR 140,000) per kW, reduced on straight line basis over the period of the Term provided however, prior to such transfer Lessor shall ensure that the Systems are in the good condition and state of repair and maintenance and in case of any discrepancies and/or deficiencies in such condition, Lessor, at its sole cost and expense, but no later than the transfer date shall remove all such discrepancies and/or deficiencies including without limitation, deficiencies in the spare parts inventory on each Facility that would be maintained by a solar PV system of a like-type to the System in accordance with prudent utility practices for a going concern. Upon such transfer the Parties shall have no further rights and obligations under the Contract Agreement.

11. Representations, and Warranties and Covenants:

- a. <u>General Representations and Warranties:</u> Each Party represents and warrants to the other the following as of the Effective Date:
 - i. Such Party is duly organized, validly existing and in good standing under the laws of the Pakistan; the execution, delivery and performance by such Party of the Contract Agreement have been duly authorized; and the Contract Agreement is valid obligation of such Party, enforceable against such Party in accordance with its terms (except as may be limited by applicable bankruptcy, insolvency, reorganization, moratorium and other similar laws now or hereafter in effect relating to creditors' rights generally).
 - Such Party has obtained all licenses, authorizations, consents and approvals required by any Governmental Authority or other third party and necessary for such Party to own its assets, carry on its business and to execute and deliver the Contract Agreement; and such Party is in compliance with all laws that relate to the Contract Agreement in all material respects.
- Lessee's Representations and Warranties and Covenants: Lessee represents and warrants to Lessor the following as of the Effective Date and covenants that throughout the Term:
 - i. <u>License</u>. Lessee has title to or a leasehold or other property interest in the Premises of each Facility. Lessee has the full right, power and authority to grant the License contained in <u>Section 7(a)</u>. Such grant of the License does not violate any law, ordinance, rule or other governmental restriction applicable to Lessee or the Facility(ies) and is not inconsistent with and will not result in a breach or default under any agreement by which Lessee is bound or that affects any Facility. If Lessee does not own any Premises or Facility(ies), Lessee has obtained all required consents from the owner of the

- Premises and/or Facility(ies) to grant the License and enter into and perform its obligations under the Contract Agreement.
- ii. <u>Accuracy of Information</u>. All information provided by Lessee to Lessor, as it pertains to each Facility's physical configuration, Lessee's planned use of the Facilities, and Lessee's estimated electricity requirements, are accurate in all material respects.

12. System and Facility Damage and Insurance.

- a. <u>System(s) and Facility(ies) Damage</u>. If any System is damaged or destroyed other than by Lessee's negligence or willful misconduct, Lessor shall promptly repair and restore the System to its pre-existing condition at its own cost and expense and or from insurance proceeds available to it pursuant to insurance coverages as required to be maintained.
- **Insurance Coverage.** At all times during the Term, Lessor shall maintain (A) property insurance on the Systems for the replacement cost thereof, (B) commercial general liability insurance with coverage of at least Rs.two (02) million per occurrence, with number of occurances unlimited.
- c. <u>Policy Provisions</u>. All insurance policies provided hereunder shall be maintained with companies either rated no less than [A] by PACRA or otherwise reasonably acceptable to the other party.
- d. <u>Certificates</u>. Upon Lessee's request each Lessor shall deliver Lessee certificates of insurance evidencing the above required coverage. Lessee's receipt, review or acceptance of such certificate shall in no way limit or relieve Lessor of the duties and responsibilities to maintain insurance as set forth in the Contract Agreement.
- 13. Ownership of Systems: Throughout the Term, Lessor shall be the legal and beneficial owner of the Systems i.e. the Project at all times, including all Environmental Attributes, and the Systems shall remain the personal property of Lessor and shall not attach to or be deemed a part of, or fixture to, any Facility or the Premises.

14. Indemnification and Limitations of Liability:

General: Each Party (the "Indemnifying Party") shall defend, indemnify and hold harmless the other Party and the directors, officers, shareholders, partners, members, agents and employees of such other Party, and the respective affiliates of each thereof (collectively, the "Indemnified Parties"), from and against all loss, damage, expense, liability and other claims, including court costs and reasonable attorneys' fees (collectively, "Liabilities") resulting from any third party actions relating to the breach of any representation or warranty set forth in Section 11 and from injury to or death of persons, and damage to or loss of property to the extent caused by or arising out of the negligent acts or omissions of, or the willful misconduct of, the Indemnifying Party (or its contractors, agents or employees) in connection with the Contract Agreement; provided, however, that nothing herein shall require the Indemnifying Party to indemnify the Indemnified Party for any Liabilities to the

extent caused by or arising out of the negligent acts or omissions of, or the willful misconduct of, the Indemnified Party.

b. <u>Limitations on Liability:</u>

- i. <u>No Consequential Damages.</u> Except with respect to indemnification for third party claims pursuant to this Section 14 and damages that result from the willful misconduct of a Party, neither Party nor its directors, officers, shareholders, partners, members, agents and employees sub-contractors or suppliers shall be liable for any indirect, special, incidental, exemplary, or consequential loss or damage of any nature arising out of their performance or non-performance hereunder even if advised of such.
- ii. <u>Actual Damages.</u> Except with respect to indemnification for third party claims pursuant to Section 14 and damages that result from the willful misconduct of Lessor, Lessor's aggregate liability under the Contract Agreement arising out of or in connection with the performance or non-performance of the Contract Agreement shall not exceed the total payments made (or, as applicable, projected to be made) by Lessee under the Contract Agreement.

15. Force Majeure:

- a. "Force Majeure" means any event or circumstances beyond the reasonable control of and without the fault or negligence of the Party claiming Force Majeure. It shall include, without limitation, failure or interruption of the production, delivery or acceptance of electricity due to: an act of god; war (declared or undeclared); sabotage; riot; insurrection; civil unrest or disturbance; terrorism; economic sanction or embargo; civil strike, work stoppage, slow-down, or lock-out; explosion; fire; earthquake; abnormal weather condition or actions of the elements; hurricane; flood; lightning;
- Except as otherwise expressly provided to the contrary in the Contract Agreement, if b. either Party is rendered wholly or partly unable to timely perform its obligations under the Contract Agreement because of a Force Majeure event, that Party shall be excused from the performance affected by the Force Majeure event (but only to the extent so affected) and the time for performing such excused obligations shall be extended as reasonably necessary; provided, that: (i) the Party affected by such Force Majeure event, as soon as reasonably practicable after obtaining knowledge of the occurrence of the claimed Force Majeure event, gives the other Party prompt oral notice, followed by a written notice reasonably describing the event; (ii) the suspension of or extension of time for performance is of no greater scope and of no longer duration than is required by the Force Majeure event; and (iii) the Party affected by such Force Majeure event uses all reasonable efforts to mitigate or remedy its inability to perform as soon as reasonably possible. The Term shall be extended day for day for each day performance is suspended due to a Force Majeure event.

- c. Notwithstanding anything herein to the contrary, the obligation to make any payment due under the Contract Agreement shall not be excused by a Force Majeure event that solely impacts Lessee's ability to make payment.
- d. If a Force Majeure event continues for a consecutive period of ninety (90) days or more within a twelve (12) month period and prevents a material part of the performance by a Party hereunder, then at any time during the continuation of the Force Majeure event, the Party not claiming the Force Majeure shall have the right to terminate the Contract Agreement without fault or further liability to either Party (except for amounts accrued but unpaid).

16. <u>Assignment and Financing:</u>

- **Assignment and Sublease:** Lessee shall not sell, transfer, assign or encumber the System(s) or any part thereof, Lessor's title or Lessee's rights under the Contract agreement. Lessee shall not, without the prior written consent of Lessor, sublet or part with possession of any System or any part thereof. Rights and obligations under the Contract Agreement may not be assigned in whole or in part by either Party without the prior written consent of the other Party. Notwithstanding the foregoing, Lessor may, without the prior written consent of Lessee, (i) assign, mortgage, pledge or otherwise collaterally assign its interests in the Contract Agreement and the System(s) to any Financing Party, (ii) assign the Contract Agreement and the System(s) to any entity through which Lessor is obtaining financing or capital for the System(s). However, any assignment of Lessor's right under the Contract Agreement, shall not result in any change to Lessee's rights and obligations under the Contract Agreement. The Contract Agreement shall be binding on and inure to the benefit of the successors and permitted assignees.
- Financing: The Parties acknowledge that Lessor may obtain construction and long-term financing or other credit support from one or more Financing Parties.
 "Financing Parties" means person or persons providing construction or permanent financing to Lessor in connection with construction, ownership, operation and maintenance of the System(s). In connection with an assignment pursuant to Section 16Error! Reference source not found., Lessee agrees to execute any consent, e stoppel or acknowledgement in form and substance reasonably acceptable to such Financing Parties.

17. Confidentiality and Publicity:

a. <u>Confidentiality:</u> If either Party provides confidential information, including business plans, strategies, financial information, proprietary, patented, licensed, copyrighted or trademarked information, and/or technical information regarding the design, operation and maintenance of the System(s) or of Lessee's business ("Confidential Information") to the other or, if in the course of performing under the Contract Agreement or negotiating the Contract Agreement a Party learns Confidential Information regarding the facilities or plans of the other, the receiving Party shall (a)

protect the Confidential Information from disclosure to third parties with the same degree of care accorded its own confidential and proprietary information, and (b) refrain from using such Confidential Information, except in the negotiation and performance of the Contract Agreement, including but not limited to obtaining financing for the System(s). Notwithstanding the above, a Party may provide such Confidential Information to its, officers, directors, members, managers, employees, agents, contractors and consultants (collectively, "Representatives"), and affiliates, lenders, and potential assignees of the Contract Agreement (provided and on condition that such potential assignees be bound by a written agreement or legal obligation restricting use and disclosure of Confidential Information). Each such recipient of Confidential Information shall be informed by the Party disclosing Confidential Information of its confidential nature and shall be directed to treat such information confidentially and shall agree to abide by these provisions. In any event, each Party shall be liable (with respect to the other Party) for any breach of this provision by any entity to whom that Party improperly discloses Confidential Information.

Agreement, neither Party shall be required to hold confidential any information that (i) becomes publicly available other than through the receiving Party, (ii) is required to be disclosed to a Governmental Authority under applicable law or pursuant to a validly issued subpoena (but a receiving Party subject to any such requirement shall promptly notify the disclosing Party of such requirement to the extent permitted by applicable law), (iii) is independently developed by the receiving Party or (iv) becomes available to the receiving Party without restriction from a third party under no obligation of confidentiality. If disclosure of information is required by a Governmental Authority, the disclosing Party shall, to the extent permitted by applicable law, notify the other Party of such required disclosure promptly upon becoming aware of such required disclosure and shall cooperate with the other Party in efforts to limit the disclosure to the maximum extent permitted by law.

18. Miscellaneous Provisions:

- **a.** Governing Law: This Contract Agreement shall be governed by, and interpreted and construed in accordance with, the laws of Pakistan.
- Arbitration and Attorneys' Fees: Any dispute arising from or relating to the Contract Agreement shall be arbitrated in accordance with Arbitration Act 1940. The prevailing party in any dispute arising out of the Contract Agreement shall be entitled to reasonable attorneys' fees and costs.
- c. <u>Notices:</u> All notices under the Contract Agreement shall be in writing and shall be by personal delivery, facsimile transmission, electronic mail, overnight courier, or regular, certified, or registered mail, return receipt requested, and deemed received upon personal delivery, acknowledgment of receipt of electronic transmission, the promised delivery date after deposit with overnight courier, or five (5) days after deposit in the mail. Notices shall be sent to the person identified in the Contract

- Agreement at the addresses set forth in the Contract Agreement or such other address as either party may specify in writing. Each party shall deem a document faxed, emailed or electronically sent in PDF form to it as an original document.
- d. <u>Survival</u>: Provisions of the Contract Agreement that should reasonably be considered to survive termination or expiry of the Contract Agreement shall survive. For the avoidance of doubt, surviving provisions shall include, without limitation, Exhibits 1 and 2 (Design, Warranties, and Specifications), <u>Section 13</u> (Representations and Warranties), <u>Section 14</u> (Insurance Coverage), <u>Section 6</u> (Indemnification and Limits of Liability), <u>Section 19</u> (Confidentiality), <u>Section 20</u> (Miscellaneous Provisions).
- e. <u>Contributory Negligence</u>. It is the intent of the Parties that where negligence is determined to have been joint, contributory or concurrent, each Party shall bear the proportionate cost of any Liability.
- f. <u>No Partnership</u>: No provision of the Contract Agreement shall be construed or represented as creating a partnership, trust, joint venture, fiduciary or any similar relationship between the Parties. No Party is authorized to act on behalf of the other Party, and neither shall be considered the agent of the other.
- g. <u>Full Agreement, Modification, Invalidity, Counterparts</u>. This Contract Agreement, together with any Exhibits, completely and exclusively states the agreement of the Parties regarding its subject matter and supersedes all prior proposals, agreements, or other communications between the Parties, oral or written, regarding its subject matter. This Contract Agreement may be modified only by a writing signed by both Parties. If any provision of the Contract Agreement is found unenforceable or invalid, such unenforceability or invalidity shall not render the Contract Agreement unenforceable or invalid as a whole. This Contract Agreement may be executed in any number of separate counterparts and each counterpart shall be considered an original and together shall comprise the same Agreement.
- No Third Party Beneficiaries. Except for the Financing Parties permitted under Section 16, this Contract Agreement and all rights hereunder are intended for the sole benefit of the Parties hereto and shall not imply or create any rights on the part of, or obligations to, any other Person.

Contract Data Conditions of Contract

Sr	Description	Clause	Explanation
		Conditions of	r
#		Contract	
1.	Amount of Performance	9	Fifteen Thousand Pak Rupees (PKR
	Security	(Basic Terms	5,000/-) per kW
		& Conditions)	
2.	Validity of Performance	9	Two hundred and ten (210) days after the
	Security	(Basic Terms	Scheduled Commercial Operation Date
		& Conditions)	
3.	Liquidated Damages per day	9	Amount of Performance Security/ 180
		(Basic Terms	
		& Conditions)	
4.	Condition Satisfaction Date	10	Thirty (30) days from the date of signing
		(Basic Terms	of the Contract Agreement (the "Effective
		& Conditions)	Date")
5.	Scheduled Commercial	11	Three hundred and sixty-five (365) days
	Operation Date	(Basic Terms	from the Condition Satisfaction Date
		& Conditions)	
6.	Indepenent Engineer	15	National Engineering Services Pakistan
		(Basic Terms	(Pyt.) Limited (NESPAK) shall be the
		& Conditions)	Independent Engineer.
			The fee for Independent Engineer
			services, excluding provincial sales tax,
			shall be two thousand nine hundred Pak
			Rupees (PKR 2,900) per kW of the
			Committed Rating for each site.
			Provincial sales tax shall be added on top
			of this fee at the applicable rates.



Technical Design Specifications and Data

Insert the fuly filled in Appendix E to the Bid.

