

REQUEST FOR PROPOSALS (RFP)

PROCUREMENT, INSTALLATION&MAINTENANCE OF SOLAR POWER SYTEM AT PIA TRAINING CENTRE KAP

Pakistan International Airline invites bids from authorized well-established suppliers, OEMs or distributors of Alternative & Renewable Energies(ARE V1)or have a JV with a ARE-V1 category company to provide the net-metering facilitation and license through K-Electric / respective DISCO", having NTN / Sales Tax registration with active ATL Status in FBR record with modern facilities for installation of 350 KW approximately (+-10%) or suitable capacity in accordance with the need on Grid Tied Solar PV System, required for **PIA TRAINING CENTRE KAP "**.

Bidding shall be conducted on 'Single Stage Two Envelop' basis. Prospective Bidders are required to submit a Pay Order of Rs. 5,000/- (non-refundable) in favor of PIACL with the technical bid. Bidders will be required to give Earnest Money 2% (refundable) in the form of a Pay Order in favor of PIACL along with their Financial Proposals.

Complete details are available in Terms of Reference (TORs) which can be downloaded from PIA (www.piac.com.pk) or PPRA website (www.ppra.org.pk).

The rates quoted should be valid for a period of one hundred and twenty days (120) days from the date of bid opening.

Prospective bidders are requested to drop their sealed proposals on or before 25th June 2020, at 15:00, in the office of GM Facilities Management, PIA Flight Operation building, KARACHI.

Technical proposals will be opened on same date at 15:30 in the presence of bidders who intend to witness the proceedings.

Proposals received after due date / time shall not be considered. PIACL will not be responsible for any postal delay.

GENERAL MANAGER

FACILITIES MANAGEMENT & MOTOR TRANSPORT

PIA HEADOFFICE KARACHI

EMAIL: gm.facilitiesmanagement@piac.aero

Tel. no. 021-99044640

RFP (Request for Proposal)

PAKISTAN INTERNATIONAL AIRLINES CORPORATION LIMITED (“PIACL”)



**PROCUREMENT, INSTALLATION & MAINTENANCE OF SOLAR POWER SYTEM AT
PIA TRAINING CENTRE KAP**

NOTICE

Pakistan International Airline invites bids from authorized well-established suppliers, OEMs or distributors of Alternative & Renewable energies V1(ARE V1) or have a JV with a ARE-V1 category company to provide the net-metering facilitation and license through K-Electric / respective DISCO", having NTN / Sales Tax registration with active ATL Status in FBR record with modern facilities for installation of 350 KW approximately (+10%)% or suitable capacity in accordance with the need, Peak on Grid Tied Solar PV System, required for **PIA TRAINING CENTRE KAP "**.

Bidding shall be conducted on 'Single Stage Two Envelop' basis. Prospective Bidders are required to submit a Pay Order of Rs. 5000/- (non-refundable) in favor of PIACL with the technical bid. Bidders will be required to give Earnest Money 2% (refundable) in the form of a Pay Order in favor of PIACL along with their Financial Proposals.

Complete details are available in Terms of Reference (TORs) which can be downloaded from PIA (www.piac.com.pk) or PPRA website (www.ppra.org.pk).

The bid validity should be for a period of one hundred and twenty days (120) days from the date of bid opening.

Interested firm must submit the following documents with their proposal,

Firm's must submit support letter as evidence of their level of relationship (i.e. Partner, distributor and reseller with the principle). This letter is to be obtained from the original equipment manufacturer (OEM).

Detailed bids are to be submitted on Firm's letter-head duly signed by an officer of the Firm. It must also include following documents pertaining to the Firm: -

- Income and sales tax registration certificates.
- Income tax return for last 03 year / audit report.
- Company profile.
- Bank statement for last 03 year / Bank credit limit for all bank accounts in the name of firm/company.
- Where to subject services provided in last 5 years. (client's list with project size along with credentials/person of contact)
- Quality Certification(s) - if any.
- OEM's Authority support letter if applicable.
- Non-black listing record certificate on stamp paper.
- Bidders are to provide quotes with validity of at least 120 days.
- All items should be quoted with maximum warranty, support and upgrade period for The product.
- Performance warranty equivalent to 10% of total bid amount will be submitted by the supplier in shape of bank guarantee or AA+ rating insurance firm for the total warranty period

- Company profile, activities, background of key shareholders and capabilities.
- Skill and experience of consortium organization and management personnel.
- The EOIs of the applicant which fulfils the eligibility/ conditions will be called for presentation which will be evaluated by the committee.

Prospective bidders are requested to drop their sealed proposals on or before 25th June 2020, at 15:00, in the office GM Facilities Management, PIA Flight Operation building, KARACHI.

Technical proposals will be opened on same date at 15:30 in the presence of bidders who intend to witness the proceedings. Proposals received after due date / time shall not be considered. PIACL will not be responsible for any postal delay.

GENERAL MANAGER
FACILITIES MANAGEMENT & MT
PIA HEADOFFICE KARACHI
EMAIL: gm.facilitiesmanagement@piac.aero
Tel. no. 021-99044640

INTRODUCTIONS

- 1.1 A brief description of the Assignment and its objectives are given in the Data Sheet.
- 1.2 The Client is undertaking the duty to implement the Project as Executing & operating agency.
- 1.3 To obtain first-hand information on the Assignment and on the local conditions, you are encouraged to visit the Client before submitting a proposal and attend a pre-proposal conference if specified in the Data Sheet. Your representative shall meet the officials named in the Data Sheet. Please ensure that these officials inform about their visit in advance to allow adequate time for them to make appropriate arrangements. You must fully update yourself of local conditions and take them into account in preparing your proposal.
- 1.4 The Client shall provide the inputs specified in the Data Sheet.
- 1.5 Please note that:
 - a) The cost of preparing the proposal and negotiating the contract, including a visit to the Client, are not reimbursable as a direct cost for the Assignment and
 - b) The Client is not bound to accept any of the proposals submitted.
 - c) Also please note that, the evaluation committee will correct any computational errors. When correcting computational errors, in case of discrepancy between a partial amount and the total amount, or between word and figures the former will prevail. In addition to the above correction, activities and items described in the technical Proposals but not priced in the financial proposals shall be assumed to be included in the prices of other activities or items. In case any activity or item is quantified in the financial proposal differently from the technical proposal, the evaluation committee shall correct the quantification indicated in the financial proposal to make it consistent with that indicated in the technical proposal.

2. DOCUMENTS

- 2.1 To prepare a proposal, please use the attached forms/documents listed in RFP as a sample, but if party put up financial evaluation and presentation on their own given pattern with sufficient clarity we have no objection.
- 2.2 Bidders requiring a clarification of the documents must notify the Client, in writing, not later than seven **(07)** days before the proposal submission date. Any request for clarification in writing, or by cable, telex or email shall be sent to the Client's address indicated in the Data Sheet.

The Client shall respond by cable, telex or email to such request and copies of the response shall be sent to all invited bidders.

2.3 At any time before the submission of proposals, the Client may, for any reason, whether at its own initiative or in response to a clarification requested by the potential bidder, modify the Documents by amendment.

The amendment shall be sent in writing or by cable, telex or email to all short-listed firms and will be binding on them. The Client may at its discretion extend the deadlines for the submission of proposals.

2A- SUBMISSION AND PREPARATION OF PROPOSAL

PIACL invites proposals from experienced firms/vendors, OEMS or Distributors based on single stage two envelopes basis to Install Solar Power System at PIA Training Centre KAP. Following procedure is defined for participation in the tender.

- a) Technical evaluation includes 02 phases, Phase-1: Profile Evaluation. Phase-2: Company Profile Presentation/proposal presentation, and Phase-3: Financial Evaluation
- b) In Phase-1, all the bidders are required to submit their Profiles, Proposed Design and Layout installation of solar power system at PIA Training Centre KAP along with a CD with presentation on company profile and proposed plan (to be presented later) , and Financial Proposal. Bidder's profiles will be evaluated as per given criteria. Shortlisted Bidders of the Phase 1 will be called for the Phase 2 in PIACL Head Office in Karachi for presentations of their designs as mentioned in the Scope of Work and then for Phase -3 for financial evaluation and one bidder with the lowest bid will be selected for the installation of solar power system at PIA Training Centre KAP.
- c) The bid should include two (2) envelopes clearly marked as Technical and Financial proposals. The Technical bid should include all documents and information mentioned under para 4 . The bidders are to submit a Pay Order of PKR 5,000 (non-refundable) with the technical proposal and 2% earnest money financial proposal, in favor of the Pakistan International Airlines Corporation Limited as tender fees and a complete detailed design proposal presentation on a CD.

3. DATA SHEET

Name of the Assignment: PROCUREMENT,INSTALLATION& MAINTENANCE OF SOLAR POWER SYTEM AT PIA TRAINING CENTRE KAP
Name of the Client: "Pakistan International Airlines Corporation Limited (PIACL)"
Description and the Objectives of the Assignment: Pakistan International Airline invites bids from authorized well-established suppliers, OEMs or distributors of Alternative & Renewable energies V1(ARE V1) or have a JV with a ARE-V1 category company to provide the net-metering facilitation and license through K-Electric / respective DISCO", having NTN / Sales Tax registration with active ATL Status in FBR record with modern facilities for installation of 350 KW approximately (+-10%) or suitable capacity in accordance with the need on Grid Tied Solar PV System, required for PIA TRAINING CENTRE KAP "
Pre-Proposal Conference: Mandatory After Site Visit. Pre-bid meeting to be held on 10 th June 2020 in the office of undersigned GM Facilities Management at 11:00 am.
For Queries Please contact, Engr. Saniya Malik AM Projects 1 ST Floor, Flight Operation Building, PIA Head Office, Tel: 021-99043227, Email: saniya.malik@piac.aero
Address for writing on the proposal: General Manager, Facilities Management Division, 1 ST Floor, Flight Operation Building, PIA Head Office, Tel: 021-9904640, Email: gm.facilitiesmanagement@piac.aero
Date and time of Technical and Financial Proposal submission: 25 th June 2020 before 1500 hours
Date and time of opening of the Technical Proposal: 25 th June 2020 - 1530 hrs
Date and time of opening of the Financial Proposal: The date and time shall be intimated to the successful bidders separately after technical evaluation process is completed.
Validity period of the Proposal: 120 Days
The name(s) and address(es) of the Client's Official(s) is (are): General Manager, Facilities Management Division,

1ST Floor, Flight Operation Building, PIA Head Office,
Tel: 021-9904640,
Email:gm.facilitiesmanagement@piac.aero

Method of Evaluation:

The proposals will be evaluated in accordance with the Quality cum Cost Based Selection Method.

Construction time: 90 days

Phase wise delivery:30% in first 60 days

Remaining 70% in last 30 days

4. TECHNICAL EVALUATION

A detailed evaluation of the bids will be conducted in order to determine whether the technical aspects are substantially responsive to the requirements set forth in the Bidding Documents. In order to reach such a determination, PIACL shall examine the information supplied by the bidders and also take into account the following factors:

- Overall experience of the bidder firm related to the assignment;
- Any other relevant technical factors that PIACL deems necessary or prudent to take into consideration.
- Income and sales tax registration certificates.
- Income tax return for last 03 year / audit report.
- Company profile.
- Bank statement for last 03 year / Bank credit limit for all bank accounts in the name of firm/company.
- Where to subject services provided in last 5 years. (clients list)
- Quality Certification(s) - if any.
- OEM's support letter if applicable.
- Non-black listing record certificate on stamp paper.
- Bidders are to provide quotes with validity of at least 120 days.
- All items should be quoted with maximum warranty, support and upgrade period for the product.
- Performance warranty equivalent to 10 % of total bid amount will be submitted by the supplier in shape of bank guarantee or AA+ rating insurance firm for the warranty period.
- Company profile, activities, background of key shareholders and capabilities.
- Skill and experience of consortium organization and management personnel.
- The EOIs of the applicant which fulfils the eligibility/ conditions will be called for presentation which will be evaluated by the committee.

Technical Evaluation Criteria: In order to ascertain the relative suitability of the offered services, PIACL shall evaluate the bids as per Technical Evaluation Criteria. Only those parties obtaining at least **70%** marks in the technical criteria shall be further evaluated whereas the remaining bids shall be rejected as being technically not suitable.

Final selection will be based on QCBA (quantified cost basis analysis)

Technical – 80%

Financial – 20%

4A- TECHNICAL EVALUATION FORM

PHASE-1 - PROFILE EVALUATION

(Total MARKS 50)

(PASSING MARKS 35)

Participants will be evaluated as per criteria defined below. Bidders with complete documents (as list mentioned above) will be considered for evaluation for Phase 1. All qualified bidders will be called for presentation in Phase 2.

- a) Company Profile (7.5Marks)
- b) Letter From OEM (5 Marks)
- c) Financial Health (7.5 Marks)
- d) Technical Experience (12.5 Marks)
- e) Litigation History (5 Marks)
- f) Installed capacity Experience (12.5 Marks)

i. Company profile (MARKS ALLOCATED 7.5)

Provide a complete company profile. Experience certificate mentioning the number of years will be provided by the participant at its letter head, which will be double checked with the date of issuance of NTN or company registration certificate plus work experience from 1st solar project done.

Years of experience (General)	Marks allocated	Marks secured
5 to 10 years	7.5	
3-5 years	5	
Less than3Years	3	

ii. Letter from OEM (MARKS ALLOCATED 5)

Provide letter from OEM indicating your firm support and good vendor (recommendation) for solar projects implementations.

Letter available	Marks allocated	Marks Secured
YES	5	
No	0	

iii. **FINANCIAL HEALTH (MARKS ALLOCATED 7.5)**

Participating organization must provide last three years annual audited accounts of the Company.

Annual Turn Over	Marks
Average Annual turnover of last three years > PKR 500 Millions	7.5
Average Annual Turnover of last three years > PKR 250Millions	5
Average Annual Turnover of last three years > PKR 100 Millions	2.5

V. **TECHNICAL EXPERIENCE (12.5 MARKS ALLOCATED)**

Details of all solar power projects done in last 05 years of 350KW OR MORE with completion certificate and performance report duly signed by the user indicating performance of years of installation.

S.NO.	PROJECTS EXPERIENCE	MAKRS ALLOCATED	MARKS SECURED
1	5 or more solar power project of more than 350KW	12.5	
2	Less than 5 projects for more than 350 KW	8	
3	Projects done less than 350 KW	5	

iv. **LITIGATION HISTORY/BLACKLISTING (MARKS ALLOCATED 5)**

Agency will be evaluated with its litigation history with any entity/Airline current and pending on similar service. One mark will be deducted up to maximum five marks for any current or historical case with any entity/airline (vice versa). Agency is required to submit the case history at its stamp paper. Otherwise PIA has right to disqualify or terminate the contract if PIA finds any litigation case of the agency, during or later on at any stage.

S.No.	Litigation History	Marks Allocated	Marks Secured
1	No litigation	5	

v. **INSTALLED CAPACITY EXPERIENCE (12.5 Marks Allocated)**

S.NO.	INSTALLED CAPACITY EXPERIENCE	MARKS ALLOCATED	MARKS SECURED
1	5 MW and Above	12.5	
2	Below 5 MW and up to 1 MW	8	
3	300 KW-1MW	5	

5. DESIGN EVALUATION**(PHASE-2)**

The proposal submitted should be presented in front of the evaluation committee, on parameters described in scope of work and will be evaluated as followed,

5.1 PHASE 2 - PROPOSED DESIGN PARAMETERS**MARKS ALLOCATED (50)
PASSING MARKS (35)**

Participating organization must provide Design as per the specifications provided in Scope of work, while Minimum Qualifying marks are 35. The design will be evaluated as per following:

S.NO.	Information/Data given by Firms Evaluation Parameters	Details	Marks
1.	Inverter	USA/Europe= 10 JAPAN/Singapore/Malaysia/Taiwan/Korea/China =5 Others=1	
2	Panel	Tier -1(as per Bloomberg) =15 others=0 Clear Mention in technicalproposal)	
3	Support Services	Local =10 Outstation=5 Provide contact details of office of technical support services	
4	Warranty	INVERTOR Upto5 YEARS =5 Less than 5 YEARS = 3 marks	

		PANEL Upto25 YEARS =5 Less than 25 years= 3 marks	
5	Literature Provided	Literature: Complete=yes/no. include complete specifications with details)	
6	Tender Conformance ToSpecs*	Yes = Qualified, No = Not Qualified [Provide BoQ+ Specifications + Datasheets] Non-conformance to any item shall result in total disqualification	
7	Overall Satisfaction To The Customer Presentation	Yes -5 No -0	

6. Scope of Work

Pakistan International Airline invites bids from authorized well-established suppliers, OEMs or distributors of Alternative & Renewable energies V1(ARE V1), have a JV with a ARE-V1 category company to provide the net-metering facilitation and license through K-Electric / respective DISCO", having NTN / Sales Tax registration with active ATL Status in FBR record with modern facilities for installation of 350 KW approximately (+- 10%) or suitable capacity in accordance with the need on Grid Tied Solar PV System, required for **PIA TRAINING CENTRE KAP "**.

There are 3 Phases of the tender. Phase-1: Profile Evaluation. Phase-2: company profile/proposal Evaluation. Phase-3: Financial Evaluation

- a) Qualified Bidders of Phase 1 will be called to present their company profile and proposals before the financial opening.
- b) Bidders qualifying in both phases will be called in for financial proposal opening.

6.1 TECHNICAL SPECIFICATIONS

SOLAR PANEL

Min Specification	
Photovoltaic Panel	MônoPERC
PV Size	>400W
Qty of cells	72
Cell Quality	A Grade, tier 1
Module Efficiency	18%
Power Tolerance	0— +5 % or more
Operating Temperature	-402C to +852C
Temperature Coefficient of Pmax	-0.40%/2C or better
Fill Factor Calculations Required)	77% or higher at STC (Detailed
Bus Bar	5
Certification or equivalent	IEC 61215, IEC 61730, IEC61701 ED2
Frame	Must withstand 5400 PA Load
Junction Box	IP 65/IP67 rated, with bypass diodes
Connectors	MC4 or comparable
Front Cover	3.2mm tempered glass or higher

Warranty	10 years product replacement
min.power	10 years for 90% of warranted min. power 11- upto 25 years for 82% of warranted

GRID INVERTER

Parameters	Description
Type of Inverter	String Inverter (Grid Tied)
Make	Tier -1(European/USA)
No of MPPT inputs	6 or more
Nominal AC Voltage	3 c, 230/400 VAC 50Hz
Operating altitude	2000m above sea level
Total Harmonic distortion	5. 3%
Efficiency	98% peak
Protection Class	IP 65 or above
Standby power consumption	<10W
Operating Temperature humidity	-25 2C "" 60 QC and 100%
Topology	Transformer less
Max Input Voltage	1KV
Rated Power @ 400 V 3 4 50Hz	25KW
Max AC Power	25KVA
Power Factor @ Rated power	1
Remote Monitoring App	Yes
Protections	
DC Protection	
DC Over Voltage Protection	
DC Under voltage Protection	
DC Over current Protection	
DC Reverse polarity Protection Over Temperature Protection Surge Protection	
Grid code complied	

AC Protection

Anti-Islanding Provision

Yes

LVRT

Yes

Protection

Grid Frequency under over

Ground Fault Protection

Leakage protection

Interface

-

RS232/US8

-RS48 Modbus Protocol / Ethernet

-LCD Display

Local Monitoring Software should be lifetime free of cost &integrated

Compliance

UL1741/ 1EEE1547, UL 1998, CE,EN 50178,

or

EN-624109-1, EN 62109-2, EN 61000-6-2,EN-621000-6-4,EN 61000-3-11, EN 61000-3-12, EN 50178,

- EC 62103, EN 55011, IEC 61000-3-11,IEC 61000-3- 12,IEC 61000-6-3

IEC 62109-1/2, IEC 61727, VDE-All-N 4105, VDE 0125-1-1, G 59/3, (these are different

country standards , IEC 62109-1/2 AND UL 1741 is needed for net metering)

PANEL MOUNTED STRUCTURE**Specifications**

- Imported Aluminum Mounting Structure with all fixing accessories (L2 or L3)designed at wind speed of 35m/s.
- Shading shall be avoided the all year around from 9:00 am to 3:00 pm.
- To allow for regular cleaning of the solar module, it should be accessible for personnel.
- Complete Design/Shading analysis report to be provided.

Item

PV to inverter Cable size should be designed appropriately for Losses not more than 3%, 97% pure copper or higher, tin coated & UV coated (Soft)

Earthing Cable to connect PV module Earthing Cable should be appropriate to provide PV Mounting structure/ Inverter with protection to complete PV plant, 97% pure earth bus bar copper or higher

Grounding Test report to be provided with resistance lower than 5 Ohm.

CABLE DUCT/TRAY**Item Specifications**

PV to inverter U-Type, Galvanized Cable Tray with ventilation

Grid (DB) to inverter: Galvanized Cable duct (Size/length as per Design).

Must be durable and does not support combustion

Inverter to Load (DB): Galvanized cable duct (Size/ length as per design). Must be durable and does not support combustion. PVC Dura duct where indoor.

Available space for installation of 350 KW Solar PV System is as under: -

a. Google Image: Appendix 'A'

6.2 Time Period of the Agreement

DELIVERY/INSTALLATION PERIOD. The delivery/installation time should not be more than 120 DAYS. Installation, testing, integration and commissioning time if applicable shall not be more than 1 week. (Relaxation may be granted as per merit of the case).

6.3 PENALTY / LATE DELIVERY.

In the event of any delay in delivery beyond 120 DAYS the firm shall inform PIAC, before expiry of such period giving reasons / justification for delay. However, purchaser reserves the right to take following actions:-

- a. Evaluate the request for extension in delivery period as per its merit and may consider extension in delivery period or otherwise.
- b. In case of late delivery for the reason swell within control of the firm, liquidation damages at the rate

of 1% per week but not exceeding 10% of the total value of the undelivered stores / items may be levied.

c. May cancel the contract.

d. The purchaser's decision under this clause shall not be subjected to arbitration.

6.4 INSPECTION / TESTING.

PIAC Inspection Committee will inspect and test the supplied Distribution Switches with accessories as per specifications and accessory list after arrival at the premises. All tests if applicable would be conducted in the presence of PIAC team and test reports if required would be signed by both the parties and submitted to PIAC to ensure 100% work performance of equipment

6.5 TERMS OF PAYMENT

No advance payments would be made. However, following payment terms and conditions will be applicable on mutual agreement: -

- A) 30 % of the total amount will be released on delivery of equipment at PIAC after verification by the respective committee.
- B) 40 % of the total amount will be released on successful inspection, checking, commissioning & training of the equipment duly confirmed by PIAC.
- C) 30% after successful implementation of financial saving on completion of 2nd month of billing from KE, which proves that the system performance is in the line with our cost benefit analysis report.

6.6 Performance Guarantee

Performance warranty equivalent to 10 % of total amount will be submitted by the supplier in shape of bank guarantee or AA+ rating insurance firm, which will be verified by PIA Insurance department.

This warranty will remain withheld at PIA Finance section for the period of warranty years (5 years) from the start of operation years, PIA reserves the right to en-cash this warranty if there would be any failure in deliverables as mentioned in scope of work.

6.7 WARRANTY.

Standard warranty service and repair within the cooperating country is required for all items under this procurement. The warranty coverage must be valid on all items as per technical specification to tender documents after their successful supply, installation and commissioning.

6.8 AFTER SALE SERVICE.

a. Supplier will guarantee the availability and the supply of **Essential Maintenance Spares** required to keep the equipment operational for a period as per the warranty of all items from the date of inspection & commissioning of equipment.

b. The firm would provide details of any improvement's modifications in the supplied equipment during warranty period in currency of the contract if carried out by the OEM.

6.9 OPERATION MAINTENANCE & TRAINING

The firm is required to provide operation maintenance for 05 years of the installed system including on ground training to the staff of PIAC for operation. (Optional) local or international

6.10 Net Metering

Net metering to be covered with end to end facilitation by the vendor/firm; however the fees will be borne by PIAC as per K-Electric/NEPRA charges and may be known before execution of project as it can be made part of the budget.

6.11 Payment of Applicable Taxes

The Contractor, and their employees shall be responsible for payment of all their taxes, including without limitation, income tax, super tax, sales tax on services and other taxes on income arising out of the Contract and the rates and prices stated in the Contract shall be deemed to cover all such taxes. Taxes to be borne by contractor on any payment arising out of the contract, as per applicable laws.

6.12 Programme To Be Submitted

The programme shall be submitted within 10 days from the date of receipt of Letter of Acceptance, which shall be in the form of:

- i) a Bar Chart identifying the critical activities, with completion date.
- ii) a CPM identifying the critical path/activities.
- iii) **TECHNICAL / USER MANUAL / PUBLICATION.** Successful vendor will be bound to provide subject material to PIAC at the time of delivery.

6.13 TURN AROUND TIME

07 days for the turnaround time (TOT) for replacement of equipment (if required with its alternate arrangement by contractor without hampering the power supply), spares parts, curing a fault, maintenance, general would be allowable, compensation of defaults attributable to contractor, in this behalf. The shipping cost of the provision initially and otherwise of the equipment and parts during the whole contract period should be borne by contractor.

6.14 Online Portal for Solar System Monitoring

Solar Online Portal should be provided with the complete system so that the PV system operators and installers can analyse & access key system data anytime, anywhere and measure values and visualize and compare yields, meaning that even minor deviations can be detected and resolved quickly.

6.15 INTEGRITY PACT

If the Contractor or any of his Subcontractors, agents or servants are found to have violated or involved in violation of the Integrity Pact signed by the Contractor as **Appendix-B**, then the Operator shall be entitled to:

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

The termination under Sub-Para (b) of this Sub-Clause shall proceed in the manner prescribed under Sub-Clauses 63.1 to 63.4 (FIDIC, Fédération Internationale Des Ingénieurs-Conseils) and the payment under Sub-Clause 63.3 shall be made after having deducted the amounts due to the Operator under Sub-Para (a) and (c) of this Sub-Clause.

7A. FINANCIAL PROPOSAL

ITEMS	NO. OF UNITS	COMPONENT PRICE	TOTAL PRICE OF EACH ITEM
PV MODULE			
INVERTERS			
SUPPORTING STRUCTURE			
CABLES			
SWITCH BOARDS AND PROTECTIONS			
NET METERING			
DATA ACQUISITION SYSTEM			
SPARE PARTS			
OTHERS (AUXILARRIES, PRINTING & REPORTING)			
SYSTEM INSTALLATION			
		TOTAL	

7B. *OPERATION & MAINTENANCE DURING WARRANTY PERIOD (5 YEARS) PER YEAR.

Services	Frequency	Rate	Amount (1 ST YEAR)	Amount (2 nd YEAR)	Amount (3 rd YEAR)	Amount (4 th YEAR)	Amount (5 th YEAR)
Ready on Site after sales support.							
Complete System monitoring.							
System trouble shooting (Remotely via cloud connectivity).							

Preventive on site visits							
Solar panels cleaning services.							
TOTAL AMOUNT PER YEAR							
TOTAL AMOUNT FOR 5 YEARS							

S.NO.	FINANCIAL PROPOSAL	OPERATION MAINTENANACE COST	TOTAL
1.			

CONSOLIDATED COST IMPACT

1KW UNIT PRICE PKR _____

350KW SYSTEM PRICE PKR _____

NOTE:

- *OPTIONAL
- Price Quotes should be valid for a minimum period of 120days from the date of opening of tender.

Any other Detail:

Name in Full _____

Designation _____

CNIC _____

Phone / Fax _____

Address _____

Signature _____

Date _____

APPENDIX A



GOOGLE IMAGE OF PIA TRAINING CENTRE

(Integrity Pact)

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

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

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

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

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

Name of Bidder _____ Name of Client _____

Signature _____ Signature _____