

**REQUEST FOR PROPOSAL (RFP)  
FROM  
CONTRACTORS/ FIRMS/ COMPANIES**

**FOR**

**DESIGN, BUILD AND INSTALLATION OF 360 KW ON/OFF HYBRID GRID  
PHOTOVOLTAIC (PV), SOLAR SYSTEM FOR ACADEMIC AND  
ADMINISTRATION BLOCK AT UNIVERSITY OF LAKKI MARWAT**

**(TECHNICAL)**

**Oct, 2024**



**University of Lakki Marwat**

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## **1.0 REQUEST FOR PROPOSAL (RFP)**

### **DESIGN, BUILD AND INSTALLATION OF 360 KW ON/OFF HYBRID GRID PHOTOVOLTAIC (PV), SOLAR SYSTEM OF (ACADEMIC BLOCK AND ADMINISTRATION BLOCK AT UNIVERSITY OF LAKKI MARWAT**

University of Lakki Marwat (ULM) invites sealed bids from authorized well-established Firms / Companies / Contractors of Alternative & Renewable Energies (ARE V1) to provide the Net-Metering facilitation and license through PESCO / WAPDA having valid NTN / Sales Tax registration with active ATL Status in FBR/KPRA record with modern facilities for Design, Build and Installation of 360 KW approximately ( $\pm 10\%$ ) or suitable capacity in accordance with the need of, On/Off Grid Hybrid Solar PV System, required for **“University of Lakki Marwat”**

Bidding shall be carried out through ‘Single stage-Two envelope’ procedure. Bidders will be required to deposit Earnest Money 2% (refundable) in the form of a Pay Order in favor of Treasurer ULM along with their bidding Proposals.

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

Prospective Bidders are requested to submit their sealed proposals on or before **11-11-2024, 11:30 AM** in the office of Deputy Director P&D University of Lakki Marwat.

Technical proposals will be opened on same date at **12:00 PM** in the presence of representative of Firms/ Companies/ Contractors who intend to witness the proceedings. A pre-bid meeting shall be held on 4-11-2024 at 11:00 AM.

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

**DEPUTY DIRECTOR PLANNING & DEVELOPMENT  
UNIVERSITY OF LAKKI MARWAT**



# University of Lakki Marwat

## **TENDER NOTICE**

University of Lakki Marwat (ULM) invites sealed bids based on MRS KP -2024 from reputed and well-established Firms / Companies/ Contractors of Alternative & Renewable energies (AREV1) to provide the Net- Metering facilitation and license through PESCO / WAPDA having valid NTN / Sales Tax registration with active ATL Status in KPRA and FBR record with modern facilities for design/ build and installation of 360 KW approximately ( $\pm 10\%$ ) or suitable capacity in accordance with the need of, On/Off Grid Hybrid Solar PV System required for " ULM ".

The tender will be on the basis of Single Stage-Two envelope procedure as per KPPRA rules.

S r. #	Name of Work	Engineer Estimate (M)	Earnest Money (2% of EE)	Required Category of PEC	Period of Completion	Last date of submission & Time	Date & Opening Time
1	Design,Built & Installation of 360 KW On/Off Grid Hybrid PV Solar System for Academic & Administration Block of University of Lakki Marwat.	74.063	1,481,265	C-4 EE-04, EE-11, and CE-10	As per Work order	11-11-2024 (11:30 AM)	11-11-2024 (12:00 PM)

### **TERMS & CONDITIONS:**

1. Bidding documents can be obtained from the office of Deputy Director (P&D) or Online at [www.ulm.edu.pk/www.kppra.gov.pk](http://www.ulm.edu.pk/www.kppra.gov.pk) on submission of printing fee of Rs.2500/- (non-refundable) in the University Account Titled "Collection Account" 2007574528 BOK Brach Code 0311.In case of Tender documents downloaded online, it should be submitted along with pay order/demand draft/payment receipt of Rs.2500/- Non-Refundable.
2. The design should be based on proper survey/analysis & existing electricity feeding system. Rates should be quoted accordingly in the price bid.
3. In case of bid more than 10% below, the bidders shall submit additional bid security in light of Khyber Pakhtunkhwa Public Procurement Regulatory Authority Notification No. S.R.O. (14)/Vol: 1-24/2021-22 dated MAY, 10-2022 which is available in KPPRA website or latest relevant KPPRA rule.
4. Financial Bid must be accompanied by bid security in shape of call deposit @ 2% of the Engineer Estimate cost in the name of Treasurer ULM.
5. Income tax returns for last 03 years / audited report.
6. Original Affidavit on Stamp Paper that the Firm DOESN'T have any Litigation History in Which a decision has been given against the firm(s).
7. The defect liability period of 01 year (all allied accessories) & warranty for solar panels for 25 years shall be commenced from the date of commissioning.
8. A Pre-bid meeting shall be held on 4-11-2024 at 11:00 AM in the committee room, University of Lakki Marwat. Bidders are invited to attend the meeting.
9. The bid shall be opened in the presence of technical committee members & bidders and work will be awarded to the most advantageous bidder.
10. All taxes etc. shall be deducted from the bill of the contractor/firms at the prescribed rates notified by the Government of Pakistan from time to time.
11. ULM reserves the right to reject any or all bids by assigning cogent reasons if requested.
12. Bid proposal through courier should reach office of the Deputy Director (P&D),ULM by the aforementioned date.

**Deputy Director (P&D)/Convener  
University of Lakki Marwat  
Ph #(0969) 510281**

## INSTRUCTIONS TO APPLICANTS/ PROSPECTIVE BIDDERS

### Submission of Applications

Applications for qualification (one original and 01 copy in hard form) must be received in sealed envelopes to be delivered through registered mail but not later than 11-11-2024 to the office of **Deputy Director (P&D) ULM**, and be clearly marked as;

**“DESIGN, BUILD AND INSTALLATION OF 330 KW ON/OFF GRID HYBRID (PV), SOLAR SYSTEM OF (ACADEMIC AND ADMINISTRATION BLOCK) AT UNIVERSITY OF LAKKI MARWAT”.**

The applications should be sent/ delivered on following address:-

**Deputy Director (P&D), ULM**  
Lakki-Tajazai Road, near Post Graduate College Lakki Marwat,  
Khyber Pakhtunkhwa Ph:0969-510281

The name and mailing address of the Firm/ Company/ Contractor shall be clearly marked on left side of the envelope.

The applications shall be prepared in the English language. Information in any other language shall be accompanied by its translation in English.

Bidders must respond to all questions and provide complete information as advised in this document. Any lapse to provide essential information may result in disqualification of the Bidders.

The clarification required may be asked through post, email([works@ulm.edu.pk](mailto:works@ulm.edu.pk)/[pnd@ulm.edu.pk](mailto:pnd@ulm.edu.pk)) or other communication means.

## **PROPOSAL PREPARATION**

A brief description of the Assignment and its objectives are provided in the Data Sheet given in section 3.0.

To obtain first-hand information on the Assignment and on the local conditions, Firms/ Companies/ Contractors are encouraged to visit the site before submitting a proposal to assess and design the system accordingly. The representatives of Firms/ Companies/Contractors shall meet the officials named in the DataSheet. Please ensure that these officials should be informed about their visit in advance to allow adequate time to facilitate the site visit. Contractor/ Firms / Companies must fully update themselves of local conditions and take them into account while preparing the proposal.

The Firm/ Company / Contractor shall provide the inputs specified in the Data Sheet.

### **Please Note That:**

The cost of preparing the proposal and site visit, are not reimbursable as a direct cost for the Assignment.

In case any activity or item is quantified in the financial proposal differently from the technical proposal, the Technical committee shall have the power to accept the quantification indicated in the financial proposal to make it consistent with that indicated in the technical proposal.

## **DOCUMENTS**

To prepare a proposal, Perspective Bidders will use the attached forms/documents listed in RFP as a sample.

Prospective Bidders requiring a clarification of the documents must notify University of Lakki Marwat in writing, but not later than seven (07) days before the proposal submission date. Any request for clarification in writing or email shall be sent to the ULM address indicated in the RFP.

## **SUBMISSION AND PREPARATION OF PROPOSAL**

ULM invites proposals from experienced Firms/ Companies/ Contractors by using single stage-two envelopes procedure for Design, Build and Installation of 326 KW Solar Power System at ULM. Following procedure is prescribed for participation in the tender.

The bid shall comprise a single package containing two separate envelopes. Each envelope shall contain separately the financial proposal and the technical proposal; The envelopes shall be marked as “FINANCIAL PROPOSAL” and “TECHNICAL PROPOSAL” in bold and legible letters to avoid confusion;

Initially, only the envelope marked “TECHNICAL PROPOSAL” shall be opened; The envelope marked as “FINANCIAL PROPOSAL” shall be retained in the custody of P&D ULM without being opened;

ULM Technical Committee shall evaluate the technical proposal in a manner prescribed in advance without reference to the prices and reject any proposal which does not conform to the specified requirements.

During the technical evaluation no amendments in the technical proposal shall be permitted.

The financial proposals of the Bids shall be opened publicly at the time, day and venue announced and communicated to the Bidders in advance.

After the evaluation and approval of the technical proposal ULM shall at a time with in the bid validity period publicly open financial proposal of the technically accepted bids only. The financial proposal of the bids found non- responsive/dis-qualified shall be returned un-opened to the respective Bidders.

The bid found to be the most advantageous bid shall be accepted.

All the Bidders are required to submit their technical proposals which will include but not limited to Company Profiles, Proposed Design including Layout of installations and Project execution plan of solar power system at ULM. This information will also be provided in soft form for presentation to the technical committee. The presentations will be held after evaluation of bids and will be communicated to the successful bidder.

Financial Bids of technically qualified Bidders will be opened for financial evaluation. Financial Proposal will be evaluated as per given criteria. The Firm/ Company/ Contractor with the most advantageous bid be selected for the Design, Build and Installation of 360 KW solar power system at ULM



**3 DATA SHEET**

**Name of the Assignment:**

**DESIGN, BUILD AND INSTALLATION OF 360 KW ON/OFF-GRID HYBRID PHOTOVOLTAIC (PV), SOLAR SYSTEM OF ACADEMIC AND ADMINISTRATION BLOCK AT UNIVERSITY OF LAKKI MARWAT**

**Name of the Client: University of Lakki Marwat**

**Description and the Objectives of the Assignment:**

ULM Construction Site invites bids from reputed and well-established Firms/ Companies/ Contractors of Alternative & Renewable energies (AREV1) having valid NTN / Sales Tax registration with active ATL Status in FBR/KPRA record for “DESIGN, BUILD AND INSTALLATION OF 360 KW ON/OFF-GRID HYBRID PHOTOVOLTAIC (PV), SOLAR SYSTEM OF ACADEMIC AND ADMINISTRATION BLOCK AT UNIVERSITY OF LAKKI MARWAT”

**For Queries Please contact:**

0969-510281

**Address for writing on the proposal:**

**Deputy Director (P&D), ULM**

Lakki-Tajazai Road, near Post Graduate College Lakki Marwat, Khyber Pakhtunkhwa Ph:0969-510281

**Date and time of Technical and Financial Proposal submission:**

11-11-2024, 11:30 AM

**Date and time of opening of the Technical Proposal:**

Technical bid will open on 11-11-2024, 12:00 PM and Financial bid opening date will be communicated later.

**Date and time of technical presentation: As per instructions of ULM.**

**Date and time of opening of the Financial Proposal: As per instructions of ULM.**

**Validity period of the Proposal:**

120 Days from the date of opening of technical proposal.

**The names and addresses of the Client's Official:**

**Deputy Director (P&D), ULM**

Lakki-Tajazai Road, near Post Graduate College Lakki Marwat, Khyber

PakhtunkhwaPh:0969-510281

**Method of Evaluation:**

The proposals will be evaluated as prescribed in evaluation criteria.

**Completion Time:**

90 days from the date of signing of contract.

**NOTE:**

**All application forms are required to be filled/signed by the bidding Firms / Companies/ Contractors**

**To be filled by Bidding Firm/ Company/ Contractor**

**Letter of Application**

*[Letterhead paper of the Applicant, including full postal address, telephone no, fax no., telex no., cable and e-mail address]*

Date:.....

To:.....

.....  
*[Name and address of the ULM]*

Sir,

1. Being duly authorized to represent and act on behalf of..... (Here in after “the Applicant”), and having reviewed and fully understood all the information provided, the undersigned hereby apply to a Bidder for the following project:-

**“DESIGN, BUILD AND INSTALLATION OF 360 KW ON/OFF-GRID HYBRIDPHOTOVOLTAIC (PV), SOLAR SYSTEM OF ACADEMIC BLOCK AND ADMINISTRATION BLOCK AT UNIVERSITY OF LAKKI MARWAT”**

2. Attached to this letter are copies of original documents defining:
- (a) The Applicant's legal status i.e.; PEC valid registration, KPRA, and FBR
  - (b) The principal place of business; Form C or equivalent
  - (c) The place of incorporation (for applicants who are corporations); or
  - (d) Active registration with Alternative Energy Development Board (AEDB)
3. ULM and its authorized representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents, and information submitted in connection with this application, and to seek clarification from our bankers and clients regarding any financial and technical aspects. This Letter of Application will also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information, to provide such information deemed necessary and requested by yourselves or the authorized representative to verify statements and information provided in this application, or with regard to the resources, experience, and competence of the Applicant.
4. ULM and its authorized representatives may contact the following persons for further information<sup>1</sup>, if needed:-

<b>General and Managerial Inquiries</b>	
Contact 1	Telephone 1
Contact 2	Telephone 2

<b>Personnel Inquiries</b>	
Contact 1	Telephone 1
Contact 2	Telephone 2

<b>Technical Inquiries</b>	
Contact 1	Telephone 1
Contact 2	Telephone 2

<b>Financial Inquiries</b>	
Contact 1	Telephone 1
Contact 2	Telephone 2

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5. This application is made with the full understanding that:
- (a) Bids will be subject to verification of all information submitted at the time of bidding;
  - (b) ULM reserves the right to:
    - (i) amend the scope and value of any contract under this project; in such event bids will only be called from technically qualified Bidders who meet the revised requirements; and
    - (ii) Reject or accept any application, and reject applications with cogent reason.
  - (c) ULM shall not be liable for any such actions and shall be under no obligation
  - (d) Inform the Applicants of the grounds for actions at 5(b) here above.
  - (e) ULM shall not be liable for consequence of, and shall be under no obligation to inform Applicants of the grounds for, actions taken under Para 5(b) here above.
6. The undersigned declare that the statements made and the information provided in the duly completed application are complete, true, and correct in every detail.

Signed:
Name:
Official Correspondence Head office Address:
With Contact Number of Firm/ Company / Contractor (Telephone/ Mobile): Email Address:

**General Information**

*All individual Firms/ Companies/ Contractors are requested to complete the information in this form. Nationality information is also to be provided for foreign owners as required under the PEC Bye-Law.*

*Where the Applicant proposes to use named subcontractors for critical components of the works, or for work contents in excess of 10 percent of the value of the whole works, the following information should also be supplied for the specialist subcontractor(s).*

1.	Name of Applicant (Firm/Company/ Contractor)	
2.	Head Office Address:	
3.	Telephone:	Contact Person: Name: Title:
4.	Fax:	Telex:
5.	Place of Incorporation/Registration	Year of incorporation/registration

<b>NATIONALITY OF OWNERS</b>		
	<b>NAME</b>	<b>NATIONALITY</b>
1.		
2.		
3.		
4.		
5.		

Name of Applicant (Firm/Company/ Contractor)

*All individual applicants are requested to complete the information in this form. The information supplied should be the annual turnover of the applicant, in terms of the amounts billed to clients for each year for work in progress or completed over the past three years.*

<b>Annual Turnover</b>		
<b>Year</b>	<b>Turnover (in actual currency)</b>	<b>Equivalent Rupees in Millions.</b>
1.		
2.		
3.		

Or attach Bank statement of 03 years

Completed Projects Experience Record

Name of Applicant (Firm/Company/ Contractor)

*To qualify, the Applicant shall be required to pass the specified requirements applicable to this form, as set out in the: Instructions to Applicants.*

*On a separate page, using the format of Application Form A-4, each is required to list all contracts of a value equivalent to Pak Rs. in million (User/ULM to provide the amount) of completed projects that are similar in nature and complexity to the contract for which the Applicant wishes to qualify, undertaken during the last five years 1. The information is to be summarized, using Application Form A-4, for each contract completed or under execution by the Applicant.*

*Where the Applicant proposes to use named subcontractor(s) for critical components of the works or for work contents in excess of 10 percent of the value of the whole works, the information in the afore-mentioned forms should also be supplied for each specialist subcontractor.*

- **Contractor Experience**

1. Provide overview of the firm’s commercial grid-connected PV experience Average commercial grid-connected PV system size installed by your company during the last five years.

- **Contractor References**

1. List three (3) or more commercial grid-connected PV projects installed over the last five years. Use the **Application Form A-4**.

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Details of Contracts of ongoing projects

Name of Applicant (Firm/Company/ Contractor)
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Use a separate sheet for each contract.

1.	Name of Contract
	Country
2.	Name of Client
3.	Client Address .....
4.	Nature of works and special features relevant to the contract for which the Firm/ Company/ Contractor wishes to prequalify ..... .....
5.	Contract Role (Tick One) (a) Sole Contractor    (b) Sub- Contractor
6.	Value of the total contract (in specified currencies) at completion, or at date of award for current contract Currency.....                      Currency.....                      Currency.....
7.	Equivalent in Pak/Rs.
8.	Date of Award
9.	Date of Completion
10.	Contract Duration (Years and Months) ____ Years                      ____ Months
11.	Specified Requirements <sup>1</sup> .....

<sup>1</sup>

*Insert any specific criteria required for particular operations, such as annual volume of designing, procurement, or fabrication of photovoltaic solar systems.*

Summary Sheet: Current Contract Commitments/Works in Progress

Name of Applicant (Firm/Company/ Contractor)
--

*Applicants should provide information on his current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which substantial Completion Certificate has yet to be issued.*

<b>Name of Contract</b>	<b>Value of Outstanding work (Equivalent Pak Rs. Millions)</b>	<b>Estimated Completion Date</b>
1.		
2.		
3.		
4.		
5.		

**Personnel Capabilities**

Name of Applicant (Firm/Company/ Contractor)
--

*For specific positions essential to contract implementation, Applicants should provide the names of at least two candidates qualified to meet the specified requirements stated for each position. The data on their experience should be supplied on separate sheets using one Form (A-7) for each candidate.*

1.	Title of Position
	Name of Prime Candidate
	Name of Alternate Candidate
2.	Title of Position
	Name of Prime Candidate
	Name of Alternate Candidate
3.	Title of Position
	Name of Prime Candidate
	Name of Alternate Candidate
4.	Title of Position
	Name of Prime Candidate
	Name of Alternate Candidate

Candidate Summary

Name of Applicant (Firm/Company/ Contractor)

<b>Position</b>		<b>Candidate</b> [Tick appropriate one] <input type="checkbox"/> Prime <input type="checkbox"/> Alternate
Candidate information	1. Name of Candidate	2. Date of Birth
	3. Professional Qualification	
Present employment	4. Name of Client	
	Address of Client	
	Telephone	Contact (manager/personnel officer)
	Fax	Telex
	Job title of candidate	Years with present firm

*Summarize professional experience over the last 20 years, in reverse chronological order. Indicate particular technical and managerial experience relevant to the Project.*

<b>Month/ Dates/Year s</b>		<b>Company / Project / Position / Relevant technical and Management experience</b>
<b>From</b>	<b>To</b>	

**Application Form A-8**  
Equipment Capabilities

Page \_\_\_ of \_\_\_ Pages

Name of Applicant (Firm/Company/ Contractor)
--

*The Applicant shall provide adequate information to demonstrate clearly that he has the capability to meet the requirements for each and all items of equipment listed in his proposal. A separate Form shall be prepared for each item of equipment proposed by the Applicant.*

Item of Equipment		
Equipment information	1. Name of manufacturer	2. Model
	3. Capacity	4. Year of manufacture
Current status	5. Current location	
	6. Details of current commitments	
Source	7. Indicate source of the equipment  <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased	

*Omit the following information if it is owned by the Applicant or partner.*

Owner	8. Name of owner	
	9. Address of owner	
	Telephone	Contact name and title
	Fax	Telex
Agreement	Details of rental/lease specific to the Project.	

Financial Capability

Name of Applicant (Firm/Company/ Contractor)
--

*Applicants should provide financial information to demonstrate that they meet the requirements stated in the Instructions to Applicants. Each Applicant must fill-in this form. If necessary, use separate sheets to provide complete banker information. A copy of the audited balance sheets should be attached.*

<b>Banker</b>	Name of banker	
	Address of banker	
	Telephone	Contact name and title
	Fax	Telex

*Summarize actual assets and liabilities in Pak Rupees (Equivalent at the current rate of exchange at the end of each year) for the previous three years, based upon known commitments, projected assets and liabilities in Pak Rupees equivalent for the next two years.*

Financial information in PakRs. or equivalent	Actual: previous five year					Projected: next two years	
	1	2	3	4	5	6	7
1. Total assets							
2. Current assets							
3. Total liabilities							
4. Current liabilities							
5. Profits before taxes							
6. Profits after taxes							
<b>7. Turn over</b>							

*Specific proposed sources of financing to meet the cash flow of the Project, net of current commitments.*

<b>Source of financing</b>	<b>Amount (Pak Rs. or equivalent)</b>
1.	
2.	
3.	
4.	

*Attach audited financial statements for the last three years (for individual Firm/Company/ Contractor).*

*Firms owned by individuals, and partnerships, may submit their balance sheets certified by a registered accountant, and supported by copies of tax returns, if audits are not required by the laws of their countries of origin in case of foreign firms.*





### 3.1

#### **CONFLICT OF INTEREST**

The Applicant must not be associated, nor have been associated in the past, with the consultant or any other entity that has prepared the design, specifications, and other prequalification and bidding documents for the project, or was proposed as Engineer for the contract, over the last five years. Any such association may result in disqualification of the Applicant.

#### **UPDATING PREQUALIFICATION INFORMATION**

Applicant shall be required to update the financial, personnel and equipment information used for technical qualification at the time of submitting their bids, to confirm their continued compliance with the qualification criteria and verification of the information provided at the time of technical qualification. A bid shall be rejected if Applicant's technical qualification thresholds no longer meet at the time of bidding.

#### **OTHER FACTORS**

Only Applicant firms/ companies / contractors that have been technically qualified under this procedure shall be eligible for opening of the financial bid. If a firm submits more than one bid, all bids including that bid will be rejected. This rule will not apply in respect of bids which include specialist sub-contractors who are used by more than one Bidder.

The ULM reserves the right to:-

- a) Amend the scope and value of contract to be bid, in which event the Bidder (s) will only bid among those technically qualified Bidders who meet the requirements of the contract as amended.
- b) Reject or accept any application; and
- c) Cancel the bidding process and reject all applications with assigning a cogent reason.

The ULM shall neither be liable for any such actions nor be under any obligation to inform the applicants of the grounds for rejection, however, may be debriefed if solicited.

Applicants may be informed in writing by letter or e-mail within 05 weeks from the date of opening of applications about the result of their applications and may be debriefed if solicited.

## 4.1 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, ULM Technical Evaluation Committee shall examine the information provided by the Bidders and also take into account the following factors:

- Overall experience of the Bidder firm related to the assignment.
- Registration with PEC, FBR, KPRA, AEDB and SECP is mandatory, in case the firm could not submit the documents, will not be considered for technical evaluation.
- Any other relevant technical factors that ULM deems necessary or prudent to take into consideration.
- Income and sales tax registration certificates.
- Income tax return for last 03 years / audit report reflected in FBR returns. Company profile.
- Bank statement for last 03 years / Bank credit limit for all bank accounts in the name of Firm/ Company/ Contractor.
- Where the 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 from the date of opening of technical bids.
- All items should be quoted with maximum warranty, support and upgrade period for the product.
- Performance Guarantee equivalent to 10 % of total bid amount will be submitted by the successful Bidder in shape of bank guarantee as per KPPRA latest notification or firm for the warranty period.
- Applicant (Contractor/ Firm/ Company) profile, activities, background of key shareholders and capabilities.
- Skill and experience of Applicant; Firm/ Company/ Contractor and management personnel. The EOIs of the technically qualified Applicants which fulfils the eligibility/conditions will be called for presentation and will be further evaluated by the technical committee.

## Technical Evaluation Criteria:

In order to ascertain the relative suitability of the offered services, ULM Technical Committee shall evaluate the bids as given below. Only those bidding Firms/ Companies/ Contractors obtaining at least **70%** marks in the technical criteria and **50%** in each category shall be further evaluated whereas the remaining bids shall be rejected as being technically not suitable.

### Technical Evaluation Form

#### Profile Evaluation

(Total Marks= 100)

(Passing Marks = 70%)

(Each Category = 50%)

Applicants will be evaluated as per criteria defined below. Bidders with complete documents (as mentioned earlier) will be considered for technical evaluation. All technically qualified Firms/ Companies/ Contractors will be called for presentation.

- |    |  |              |
|----|--|--------------|
| a) | Company Profile  | (15.0 Marks) |
| b) | Financial Health   | (15.0 Marks) |
| c) | Technical Experience (in Hand)/ Installed<br>Capacity Experience (Completed) | (45 Marks)   |
| d) | Equipment Capabilities   | (5.0 Marks)  |
| e) | Design Evaluation  | (20.0 Marks) |

#### Company profile

(Marks Allocated 15)

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

Years of experience (General)	Marks allocated	Marks secured
More than 5 years	15	
3-5Years	10	
1-2 years	7.5	

**Financial Health****(Marks Allocated 15.0)**

Participating Firms/Companies/ Contractors must provide last three years annual audited accounts of the Company.

<b>Annual Turn Over</b>	<b>Marks</b>
Average Annual Turnover of last three years > or = PKR 70 Million	15.0
Average Annual Turnover of last three years from PKR 55 Million up to PKR 69.99Million	10
Average Annual Turnover of last three years from PKR 35 Million up to PKR 54.99 Million	7.5

**A. Technical Experience****(Marks Allocated 22.5)**

Detail of all solar power projects in hand in last 03 years of 350 KW or more capacity having work orders duly signed by the user, indicating years of installation.

<b>S.NO</b>	<b>PROJECTS EXPERIENCE IN HAND</b>	<b>MAKRS ALLOCATED</b>	<b>MARKS SECURED</b>
1	03 projects of 350 KW & above with valid documentary proof must be attached with Technical Bids.	22.5	
2	02 projects of 350 KW & above with valid documentary proof must be attached with Technical Bids.	15	
3	01 project of 350 KW & above with valid documentary proof must be attached with Technical Bids.	10	

**B. Total Installed Capacity****(Marks Allocated 22.5)**

<b>S.NO</b>	<b>INSTALLED CAPACITY EXPERIENCE COMPLETED</b>	<b>MARKS ALLOCATED</b>	<b>MARKS SECURED</b>
1	03 projects of 350 KW & above with valid documentary proof and satisfactory performance certificate must be attached with Technical Bids.	22.5	
2	02 projects of 350 KW & above with valid documentary proof and satisfactory performance certificate must be attached with Technical Bids.	15	
3	01 project of 350 KW & above with valid documentary proof and satisfactory performance certificate must be attached with Technical Bids.	10	

**EQUIPMENT CAPABILITY: (5 Marks)**

<b>S No</b>	<b>Description</b>	<b>QTY</b>	<b>Marks Assigned</b>	<b>Explanation for Marks Obtained</b>
1	Generator 10 KVA	01	01	Applicant firm must provide the list of equipment on Judicial stamp paper of the current month and also provide statement about the current status of equipment. Note: - the equipment provided in the list would be verified at site during the execution of project for confirming the quality work.
2	Welding Plant, Solar Pathfinder, Large Cable Cutter, Angle finder, Torpedo level	02	01	
3	Fish tape and Chalk line, Cordless drill (14.4V or greater), Uni bit and multiple drill bits (wood, metal, masonry)	01	0.25	
4	Hole saw and Hole punch	02	0.25	
5	Torque wrench with deep sockets and Nut drivers	04	0.25	
6	Wire strippers, Crimpers, Lineman's pliers, Slip-joint pliers	03	0.25	
7	Small cable cutters, AC/DC multi meter, Hacksaw, Tape measure	02	0.25	
8	Heavy duty extension cords, Caulking gun, DC clamp-on ammeter	01	0.25	
9	Reciprocating saw / Jig saw, Right angle drill, Conduit bender, Large crimpers	01	0.5	
10	Magnetic wristband for holding bits and parts, C-clamps, Stud finder, Pry bar, DC clamp-on ammeter, Fuse Pullers, Stud finder, Pry bar	01	01	
			<b>5</b>	

**DESIGN EVALUATION**

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

**PROPOSED DESIGN PARAMETERS****Marks Allocated (20)**

Participating Firms / Companies/ Contractors must provide Design as per the specifications provided in Scope of work, while Minimum Qualifying marks are 7.5. The design will be evaluated as per following:

<b>S.NO.</b>	<b>Information/Data given by Firms Evaluation Parameters</b>	<b>Details</b>	<b>Marks</b>
1	Inverter	USA/ Europe/ Japan =5.0 marks  Singapore/Malaysia/Taiwan/Korea/ China  = 2 marks  Others = 00 mark	
2	Panel	Tier -1(as per Bloomberg) =2.5 marks  Others =00 mark  Clear Mention in technical Proposal	
3	Support Services	Local =4  Outstation =2  Provide contact details of office of technical support services.	

4	Warranty	<p><b>INVERTOR</b></p> <p>Up to 5 YEARS = 3 marks Up to 4 YEARS = 1 marks</p> <p><b>BATTERY</b></p> <p>Equal to or more than 5 Years=3 Marks 3 Years = 1 Mark</p> <p><b>PANEL</b></p> <p>Up to 25 YEARS = 1 mark Between 15- 25 YEARS = 0.5 mark</p>	
5	Tender Conformance To Specs*	<p>Yes = Qualified No = Not Qualified</p> <p>Provisioning of following requirements is mandatory</p> <ul style="list-style-type: none"> <li>i. BoQ</li> <li>ii. Specifications</li> <li>iii. Data sheets</li> <li>iv. Layout drawings with complete wiring plan.</li> </ul> <p>Non-conformance to any of the above item shall result in total disqualification.</p>	
6	Literature Provided	<p><b>Literature:</b></p> <p>Complete = <b>Yes / No</b></p> <p>The Applicant is required to submit complete literature about the equipment and fixture mentioned in the proposed BOQ, Specification, and Data sheet.</p>	

7	Overall Satisfaction To The Customer Presentation	Yes	= 1.5 marks	
		No	= 00 marks	



## Scope of Work

ULM invites bids from authorized, well-established Firms / Companies / Contractors of Alternative & Renewable Energies (ARE V1) having valid NTN / Sales Tax registration with active ATL Status in FBR record with modern facilities for Design, Build, and Installation of 360 KW approximately ( $\pm 10\%$ ) or suitable capacity in accordance with the need of, On-Grid/Off Grid Hybrid Solar PV System, required for "**ULM UNDER-CONSTRUCTION CAMPUS**" on roof tops/Parking areas of existing buildings.

### TECHNICAL SPECIFICATION:

For all appliances, materials, equipment etc, Standard specifications will be followed accompanied by the below mentioned parameters of individual items;

### Solar Panel on Roof Tops of Existing Buildings of ULM

Minimum Specifications	
Photovoltaic Panel	Môno PERC N-Type ISO certified, Longi, Jinko, Trian, Canadian
PV Size	>500W
Qty of cells	>72
Bus Bar	5 Bus Bar solar cell
Cell Quality	A Grade, tier 1 Bloomberg
Module Efficiency	>18%
Power Tolerance	0—+5 % or more
Operating Temperature	-40.2C to +85.2C
Temperature Coefficient of Pmax	-0.40%/2C or better
Fill Factor (Calculations Required)	77% or higher at STC (Detailed)
Certification or equivalent	IEC 61215, IEC 61730, IEC61701 ED2, UL1703
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 10 years for 90% of warranted minimum power 11 to 25 years for 85% of warranted minimum power

## Grid Inverter

<b>Minimum Specifications</b>	
Parameters	Description
Type of Inverter	On/Off Grid Hybrid 3 phase, WAPDA / Gen.Sync. with built-in Wi-Fi for Data Monitoring.
Make	Japan/ European/USA Singapore/Malaysia/Taiwan/Korea/China
No of MPPT inputs	6 or more independent MPP trackers
Nominal AC Voltage	3 c, 230/400 VAC 50Hz
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	40 KW
Max AC Power	50 KVA
Power Factor @ Rated power	0.8
Remote Monitoring App	Yes
Protections	

#### AC/ DC Protection

- i. AC/ DC Over Voltage Protection
- ii. AC/ DC Under voltage Protection
- iii. AC/ DC Over current Protection
- iv. AC/ DC Reverse polarity Protection, Over Temperature Protection, Surge Protection and Grid code complied

<b>AC Protection</b>	Yes
Anti-Islanding Provision	Yes
LVRT	Grid Frequency under/ over
Protection	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/ IEEE1547, 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, IEC 62103, EN 55011, IEC 61000-3-11, IEC 61000-3- 12,IEC 61000-6-3 IEC 62109-1/2, AND UL 1741 IEC 61727, VDE-All-N 4105, VDE 0125-11, G59/3, (different country standards needed for net metering)

### **Panel Mounted Structure on Roof Tops/Parking areas**

#### **Specifications:**

- a. GI Mountings (Hot Dip) for Flat Roof Tops with at-least 15 degree **or as per site requirement** tilt designed at wind speed of 40m/s.
- b. Shading shall be avoided all year around from 9:00 am to 4:00 pm.
- c. To allow for regular cleaning of the solar module, it should be accessible to cleaning staff.
- d. Complete Design, Structural and shading analysis report is required to be provided.

## **PV to inverter**

- a. **PV to inverter** Cable size should be designed appropriately for Losses not more than 1.5%, 99% pure copper or higher, tin coated & UV coated (Soft).
- b. Panel wiring (4mm<sup>2</sup>), Double EVA-XLPE Double insulation 1500 V, combiner boxes, conduits, clamps etc. as required.
- c. High Voltage wiring and circuit breakers, conduits etc. (50 feet / inverter).

## **Cable Duct / Tray**

### **Item Specifications:**

PV to inverter-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.

## **Earthing Cable**

Earthing Cable to Connect PV Module Earthing:- Cable should be appropriate to provide PV Mounting structure/ Inverter with protection to complete PV plant with lightning arrestors, 99% pure earth bus bar copper or higher.

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

## **TIME PERIOD OF DELIVERY / INSTALLATION.**

**Delivery / Installation Period:** - The delivery/installation time should not be more than 90 Days from the date of signing of contract. Installation, testing, integration and commissioning time if applicable shall not be more than 1 week from the above mentioned time period excluding the installation of net meter besides NEPPRA license.

## **PENALTY / LATE DELIVERY**

In the event of any delay in delivery beyond 90 Days, the Successful Bidder shall inform ULM before expiry of such period giving reasons / justifications for delay.

However, ULM 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/installation period or otherwise.
- b) In case of late delivery for the reason well within control of the firm, liquidation damages at the rate of 1% per 04 weeks but not exceeding 10% of the total value of undelivered/stores items may be levied.
- c) May cancel the contract.
- d) The ULM decision under this clause shall not be subjected to arbitration.

## **INSPECTION / TESTING**

ULM Technical Committee for solarisation will inspect and test the supplied Distribution Switches with accessories as per specifications and accessory list after arrival at the premises. All the material, & alliances shall be purchased from Authorized company dealer with active dealer certificate. All applicable tests would be conducted in the presence of ULM Technical Team and required test reports would be signed by both the parties and submitted to P&D ULM to ensure 100% workperformance of equipment and services.

## **TERMS OF PAYMENT**

No advance payment will be made as per Government rules. The payment will be made to the supplier after inspection of supplied items by a committee of experts constituted by the University. If found in order in all respects after the successful and complete supply, installation, testing, and commissioning of the items, the payments would be made.

### **Price Adjustment**

Not Applicable

## **WARRANTY**

Standard warranty service and repair will be provided 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.

## **AFTER SALE SERVICE.**

- a. Applicant will guarantee the availability and the supply of Essential Maintenance Spares and Parts 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 Applicant 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.

## **OPERATION MAINTENANCE & TRAINING**

The Applicant is required to provide operation maintenance for a period of 05 years of the installed system including on job training to the relevant staff of ULM for operation.

## **PAYMENT OF APPLICABLE TAXES**

The Applicant, and their employees shall be responsible for payment of all their taxes, including income 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 the Successful Bidder on any payment arising out of the contract, as per applicable laws.

## **PROJECT PLAN SUBMISSION**

The Final Project Execution Plan shall be submitted by the Successful Bidder within 10 days from the date of receipt of Letter of Acceptance, which shall be either planed on MS-Project or Primavera Latest Version. It will contain the following minimum information but not limited to the following: -

- i. A Bar Chart identifying the critical activities, with completion date.
- ii. TECHNICAL / USER MANUAL / PUBLICATION: Successful Bidder will be bound to provide subject material to ULM before commissioning.

### **TURN AROUND TIME**

07 days for the turnaround time (TOT) for replacement of equipment (if required with its alternate arrangement by Firm / Company/ Contractor without hampering the power supply), spare parts, curing a fault, maintenance, etc. would be allowed, The shipping cost of the provision initially and otherwise of the equipment and parts during the whole contract period should be borne by Firm/Company/ Contractor.

### **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 analyze & 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.

### **INTEGRITY PACT**

If the successful bidder or any of his Subcontractors, agents or servants are found to have violated or involved in violation of the Integrity Pact signed by the Firm / Company/ Contractor at the time of contract then ULM shall be entitled to:

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