BIDDING DOCUMENTS

FOR

PROVISION OF CONSULTANCY SERVICES TO QUAID-E-AZAM SOLAR POWER (PVT) LIMITED FOR INDEPENDENT COMPLIANCE AUDITING SERVICES (FY 2022-23) FOR 100 MWp SOLAR PHOTOVOLTAIC (PV) POWER PLANT AT BAHAWALPUR, PUNJAB, PAKISTAN Under Punjab Procurement Rules, 2014



Quaid-e-Azam Solar Power (Pvt) Ltd

No: QASPL/2023/ICA/01

Section 1: Letter of Invitation

То

SUBJECT: LETTER OF INVITATION

Dear Mr./Ms.:

- Quaid-e-Azam Solar Power (Pvt) Ltd (QASPL) invites quotations for the Provision of consultancy services (FY 2023-24) to Quaid-e-Azam Solar Power (Pvt) Limited for Independent Compliance Auditing Services for 100 MWp Solar Photovoltaic (PV) Power Plant at Bahawalpur, Punjab, Pakistan. Details on the services are providing terms of Reference.
- 2. The Independent Compliance Auditor (ICA) will be selected on Least Cost Basis and procedures described in this document, in accordance with the Punjab Procurements Rules 2014.
- 3. The Bidding document includes the following additional documents:
 - Section 2 Instructions to Consultants (including Data Sheet)
 - Section 3 Technical Proposal Standard Forms
 - Section 4 Financial Quotation Standard Forms
 - Section 5 Terms of Reference
 - Section 6 Standard Form of Contract
- 4. Proposals to be made using the Standard Forms of the Bbdding document. If any information required in the forms is found missing, or written elsewhere, no credit will be given in the relevant section of the evaluation.
- 5. The information should be sent to the following address:

Designation: Chief Executive Officer

Address: 3rd Floor, 83 A E/1, Main Boulevard, Gulberg III, Lahore *E-mail:* pm@qasolar.com; projectmanagement@qasolar.com

Yours sincerely,

Chief Executive Officer, Quaid-e-Azam Solar Power (Pvt) Ltd Lahore

Section 2: Instructions to Firms

Definitions (a) "Assignment" means providing Independent Compliance Auditing Services to QASPL. (b) "Client" means the Quaid-e-Azam Solar Power (Pvt) Ltd. (c) "Consultant" means any firm/consortium/joint venture that provides the Independent Compliance Auditing Services to the Client under the Contract. "Contract" means the Contract included in this bidding (d) document as Section 6, when signed by the Parties, and all attached documents. (e) "Data Sheet" means such part of the Instructions to Firms used to reflect specific conditions. (f) "Day" means calendar day. "Firms" means any firms/consortiums/joint ventures whose who wish to submit proposal in response to this bidding document. (h) "Government" means the Government of the Punjab and all its associated departments, agencies, autonomous/semiautonomous bodies, local governments, boards, universities and similar other organizations. "Instructions to Firms" means the document, which provides (i) Firms with information needed to prepare their Proposals. "LOI" means the Letter of Invitation included in the bidding (j) document as Section 1 being sent by the Client to the Firms. (k) "Personnel" means professionals and support staff provided by the Firms or by any sub-consultant and assigned to perform the Services or any part thereof; "Foreign Personnel" means such professionals and support staff who at the time of being so provided had their domicile outside Pakistan; "Local Personnel" means such professionals and support staff who at the time of being so provided had their

domicile inside Pakistan.

Consultant pursuant to the Contract.

Ouotation.

(1)

"Proposal" means the Technical Proposal and the Financial

(m) "Services" means the Assignment to be performed by the

	(n) "Rules" means the Punjab Procurement Rules-2014 (PPR-009) notified in Provision of Punjab Procurement Regulatory Authority Act 2009 (VIII of 2009).
	(o) "Terms of Reference" (TOR) means the document included in the Bidding documents as Section 5 which explains the objectives, scope of work, activities, tasks to be performed, respective responsibilities of the Client and the Consultant, and expected results and deliverables of the assignment.
1. Introduction	1.1 The Client shall select the ICA in accordance with the Punjab Procurement Rules-2014.
	1.2 Firms are invited to submit a Technical Proposal and a Financial Quotation for Services required for the Assignment. The proposals should be in separate marked and sealed envelopes. The Proposal will be the basis for a signed Contract with the selected Firm.
	1.3 Firms should familiarize themselves with Assignment conditions and take them into account in preparing their Proposals.
	1.4 Firms shall bear all costs associated with the preparation and submission of their Proposals and finalization of Contract. The Client is not bound to accept any Proposal, and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Firms.
Conflict of Interest	1.5 QASPL requires that the Consultant provides professional, objective, and impartial advice and at all times, hold the Client's interests paramount, strictly avoid conflicts with other assignments or their own corporate interests, and act without any consideration for future work.
	1.5.1 Without limitation to the generality of the foregoing, the Consultant, and any of its affiliates, shall be considered to have a conflict of interest and shall not be recruited, under any of the circumstances set forth below:
Conflicting activities	(i) A firm that has been engaged by the Client to provide goods, works or services other than consulting services for a project, and any of its affiliates, shall be disqualified from providing consulting services related to those goods, works or services. Conversely, a firm hired to provide consulting services for the preparation or implementation of a project, and any of its affiliates, shall be disqualified from

	subsequently providing goods or works or services other than consulting services resulting from or directly related to the firm's consulting services for such preparation or implementation.
Conflicting assignments	(ii) A firm (including its Personnel and subconsultants) or any of its affiliates shall not be hired for any assignment that, by its nature, may be in conflict with another assignment of the firm to be executed for the same or for another Client.
Conflicting relationships	(iii) A firm (including its Personnel and subconsultants) that has a business or family relationship with a member of the Client's staff who is directly or indirectly involved in any part of (i) the preparation of the Terms of Reference of the assignment, (ii) the selection process for such assignment, or (iii) supervision of the contract, may not be awarded a contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the QASPL throughout the selection process and the execution of the Contract.
	1.5.2 Firms / Consultant have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Client, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the firm/Consultant or the termination of its Contract.
Fraud and Corruption	1.6 The QASPL requires Firms and the Consultant participating in this Assignment to adhere to the highest ethical standards, both during the selection process and throughout the execution of the Contract. In pursuance of this policy, the QASPL: (a) defines, for the purpose of this paragraph, the terms set forth below as follows: (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the selection process or in execution of a contract; (ii) "fraudulent practice" means a misrepresentation or omission of facts in order

			to influence a selection process or the execution of a contract; (iii) "collusive practices" means a scheme or
		(b)	arrangement between two or more firms with or without the knowledge of the Client, designed to establish prices at artificial, noncompetitive levels; (iv) "Coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract. will reject a Proposal for award if it determines that the Firm recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract;
			will sanction a Firm, including declaring the Firm ineligible, either indefinitely or for a stated period of time, to be awarded a QASPL contract if at any time it determines that the Firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a QASPL contract; and
			will have the right to require Firms to permit the QASPL to inspect their accounts and records and other documents relating to the submission of proposals and contract performance, and have them audited by auditors appointed by the QASPL.
	1.7	be und fraudul with the	their sub-consultants, and their associates shall not ler a declaration of ineligibility for corrupt and ent practices issued by the QASPL in accordance e above para. 1.6. Furthermore, the Firms shall be of the provisions on fraud and corruption stated in cific clauses in the General Conditions of Contract.
Only one Proposal	1.8	particip	may only submit one Proposal. If a Firm submits or pates in more than one Proposal, all such Proposals ually or mutually shall be disqualified.
Proposal Validity	1.9	remain Firms s nomina effort t Should Firms t	ta Sheet indicates how long Firms' Proposals must valid after the submission date. During this period, shall maintain the availability of professional staff ted in the Proposal. The Client will make its best to complete award of Contract within this period. the need arise, however, the Client may request to extend the validity period of their Proposals. Firms gree to such extension shall confirm that they

	maintain the availability of the professional staff nominated in the Proposal, or in their confirmation of extension of validity of the Proposal, Firms may submit new staff in replacement, who would be considered in the final evaluation for Contract award. Firms who do not agree have the right to refuse to extend the validity of their Proposals.
Clarification and Amendment of Documents	2.1 Firms may request a clarification of any of the documents till the date indicated in the Data Sheet. Any request for clarification must be sent in writing, or by standard electronic means to the Client's address indicated in the Data Sheet. The Client will respond in writing, or by standard electronic means (email) and will send written copies of the response (including an explanation of the query but without identifying the source of inquiry) to all Firms. Should the Client deem it necessary to amend the document as a result of a clarification, it shall do so following the procedure under para. 2.2.
	2.2 At any time before the submission of Proposals, the Client may amend the document by issuing an addendum in writing to give Firms reasonable time in which to take an amendment into account in their Proposals the Client may, if the amendment is substantial, extend the deadline for the submission of Proposals.
Preparation of Proposals	3.1 The Proposal (see para. 1.2), as well as all related correspondence exchanged by the Firms and the Client, shall be written in English.
	In preparing their Proposal, Firms are expected to examine in detail the documents comprising the bidding documents Material deficiencies in providing the information requested may result in rejection of a Proposal.
Technical Proposal Format and Content	3.3 The Technical Proposal shall not include any financial information. A Technical Proposal containing financial information shall be declared non responsive.
Financial Proposals	3.4 The Financial Proposal shall be prepared using the attached Standard Forms (Section 4). It shall list all costs associated with the Assignment. The Firm shall provide the Client with breakdown of remuneration rates as detailed in Form FIN-2 of Section 4.
Taxes	3.5 The Consultant shall provide services subject to all local taxes (such as: value added or sales tax or income taxes including taxes on non-resident Foreign Personnel, duties, fees, levies) on amounts payable by the Client under the Contract.

	3.6	Consultants shall express the price of their Services in Pakistan Rupees.
4. Submission, Receipt, and Opening of Proposals	4.1	The original Proposal (Technical Proposal and, Financial Proposal; see para. 1.2) shall contain no interlineations or overwriting, except as necessary to correct errors made by the Firms themselves. The person who signed the Proposal must initial such corrections. Submission letters for both Technical and Financial Proposals should respectively be in the format of Form TECH-1 of Section 3, and Form FIN-1 of Section 4.
	4.2	An authorized representative of the Firm shall initial all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney accompanying the Proposal or in any other form demonstrating that the representative has been duly authorized to sign. The signed Technical and Financial Proposals shall be marked "Original".
	4.3	The Technical Proposal shall be marked "Original" or "Copy" as appropriate. The Technical Proposals shall be sent to the addresses referred to in para. 4.5 and in the number of copies indicated in the Data Sheet. All required copies of the Technical Proposal are to be made from the original. If there are discrepancies between the original and the copies of the Technical Proposal, the original prevails.
	4.4	The original and all copies of the Technical Proposal shall be placed in a sealed envelope clearly marked "Technical Proposal" Similarly, the original Financial Proposal shall be placed in a sealed envelope clearly marked "Financial Proposal" followed by the name of the Assignment, and with a warning "Do Not Open With The Technical Proposal." The envelopes containing the Technical and Financial Proposals shall be placed into an outer envelope and sealed. This outer envelope shall bear the submission address and title of the Assignment, clearly marked "Do Not Open, Except In Presence Of The Official Appointed, Before Submission Deadline". The Client shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. This circumstance may constitute a case for rejecting the Proposal. If the Financial Proposal is not submitted in a separate sealed envelope duly marked as indicated above, this will constitute grounds for declaring the Proposal non-responsive.
	4.5	The Proposals must be sent to the address/addresses indicated in the Data Sheet and received by the Client no later than the time and the date indicated in the Data Sheet,

5. Proposal Evaluation	4.6 5.1	or any extension to this date in accordance with para. 2.2. Any Proposal received by the Client after the deadline for submission shall be returned unopened. The Client shall open the Technical Proposal as mentioned in bid data sheet. The envelopes with the Financial Quotation shall remain sealed and securely stored. From the time the Proposals are opened to the time the Contract is awarded, the Firms should not contact the Client on any matter related to its Technical and/or Financial Proposal. Any effort by Firms to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Firms' Proposal.
		The Evaluation Committee, while evaluating Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded.
Evaluation of Technical Proposals	5.2	The Evaluation Committee shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria, and point system specified. Each responsive Proposal will be given a technical score (St). A Proposal shall be rejected at this stage if it does not respond to important aspects of the bidding documents. and particularly the Terms of Reference or if it fails to achieve the minimum technical score indicated in the Data Sheet.
Public Opening and Evaluation of Financial Proposals	5.3	After the technical evaluation is completed, the Client shall inform the Firms who have submitted proposals the technical scores obtained by their Technical Proposals, and shall notify those Firms whose Proposals did not meet the minimum qualifying mark or were considered non responsive to the bidding documents and TOR, that their Financial Proposals will be returned unopened after completing the selection process. The Client shall simultaneously notify in writing Firms that have secured the minimum qualifying mark, the date, time and location for opening the Financial Proposals. Firms' attendance at the opening of Financial Proposals is optional. The opening date shall be set so as to allow interested firms sufficient time to make arrangements for attending the opening. Financial Quotation will be opened publicly in the presence of the Firms' representatives who choose to attend. The
		name of the Firms, and the technical scores of the Firms shall be read aloud. The Financial Proposal of the Firms who met the minimum qualifying mark will then be inspected to confirm that they have remained sealed and

			unopened. These Financial Proposals shall be then opened, and the total prices read aloud and recorded.	
		5.5	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 formers will prevail. In addition to the above corrections, as indicated under para. 3.6, activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items. In case an activity or line item is quantified in the Financial Proposal differently from the Technical Proposal, (i) if the Time-Based form of contract has been included in the bidding documents, the Evaluation Committee shall correct the quantification indicated in the Financial Proposal so as to make it consistent with that indicated in the Technical Proposal, apply the relevant unit price included in the Financial Proposal cost, (ii) if the Lump-Sum form of contract has been included in the bidding documents, no corrections are applied to the Financial Proposal in this respect.	
		5.6	The lowest evaluated firm will be invited for negotiations.	
6.	Negotiations	6.1	The negotiations may be conducted as per PPRA Rules 2014. The invited Firm will, as a pre-requisite for attendance at the negotiations, confirm availability of all Professional staff. Failure in satisfying such requirements may result in the Client proceeding to negotiate with the next-ranked Firm. Representatives conducting negotiations on behalf of the Firm must have written authority to negotiate and conclude a Contract.	
	Conclusion of the negotiations	6.2	Negotiations will conclude with a review of the draft Contract. To complete negotiations the Client and the Firm will initial the agreed Contract. If negotiations fail, the Client will invite the Firm whose Proposal received the second highest score to negotiate a Contract.	
7.	Award of Contract	7.1 The Consultancy Firm is expected to commence the assignment on the date and at the location specified in the Data Sheet.		
8.	Confidentiality	rece the offi eva info	ormation relating to evaluation of Proposals and ommendations concerning awards shall not be disclosed to Firm who submitted the Proposals or to other persons not icially concerned with the process, until the announcement of luation report. The undue use by any Firm of confidential ormation related to the process may result in the rejection of Proposal and may be subject to the provisions of the	

Consultant corruption.	Selection	Guidelines	relating	to	fraud	and
1						

Instructions to Firms

DATA SHEET

Paragraph Reference	
1.1	Name of the Client: Quaid-e-Azam Solar Power (Pvt.) Ltd (QASPL)
1.1	Method of selection: Rule 46A of PPRA
1.2	Financial Quotation to be submitted together with Technical Proposal separately in sealed envelope: Yes √ No Name of the assignment is: Provision of Consultancy Services to Quaid-e-Azam Solar Power (Pvt) Limited for Independent Compliance Auditing Services for 100 MWp Solar Photovoltaic (PV) Power Plant at Bahawalpur, Punjab, Pakistan
1.3	A pre-proposal conference will be held: Yes No√
1.12	Proposals must remain valid for a period of <u>90</u> days after the submission date.
3.8	Firm to state Financial quotation in the national currency, i.e PKR: Yes $$ No
4.3	Firm must submit the 1 original Technical Proposal, and 1 original of the Financial Quotation.
4.5	The Proposal submission address is: Chief Executive Officer 3rd Floor, 83 A E/1, Main Boulevard, Gulberg III, Lahore Phone: +92 99332261-65 Fax 042-35790366 Email: pm@qasolar.com; projectmanagement@qasolar.com Proposals must be submitted no later than the following date and time: 12 th October, 2023 by 11:00 am PST.
4.6	The Technical Proposal shall be opened on the following date and time: <u>12th</u> <u>October, 2023 by 11:30 am PST.</u>
5.2 (a)	Criteria, sub-criteria, and point system for the evaluation of Technical Proposals are:

	Eligibility Criteria				
Sr.	Description	Yes /			
No.		No			
01	Certificate of registration with the relevant forum				
	(copy of the registration to be provided)				
02	Copy of Registration with FBR with active				
	taxpayer status;				
03	Copy of Registration with PRA with active				
	taxpayer status;				
04	Affidavit on stamp paper that Bidder is not				
	blacklisted by any government /				
	Autonomous Body;				
05	A valid certificate of registration with the Pakistan				
	Engineering Council (In case of an invalid/expired				
	PEC license, the company must provide a valid				
	PEC license at the time of contract signing)				
06	Audited Financial Statements of the last 3 years				

Those firms who did not fulfil the eligibility criteria, shall stand disqualified.

Technical Evaluation Criteria

1) Company Profile 100 Points		
a	Number of similar assignments	40
b	Value of similar assignments	40
С	Financial capability (Provide last 3-year	5
	turnover supported by audited statements)	
d	Availability of Quality Management System &	10
	Organizational Structure	
e	Current Ratio	5
	Total	A 1

2) Project Team 100 Points

1. Education and qualifications [30%]

2. Relevant Experience [70%]

Education:

M.Sc. Degree in relevant field: 100% Marks

B.Sc. Engineering: 80% Marks

Relevant Experience:

100% = Strong

65% = Medium

33% = Weak

Positions	
Solar PV Specialist (Team Leader)	50
Contracts Specialist	25

	Contract will be awarded to lowest evaluated bidder.	-
5.6	The formula for determining the financial scores is the following:	
	Note: The minimum technical score required to pass is	65% marks.
	Technical Score* = $A_1[25] + A_2[70] + 100$	A ₃ [5] 100
	Total	A 3
	b Methodology & Work Plan	60
	a Understanding & Innovativeness	40
	3) Approach & Methodology 100 Points	
	2) Approach & Mothodology 100 Points	
	Total	A ₂
	Resident Engineer	25

Section 3: Technical Proposal - Standard Forms

Refer to Reference Paragraph 3.4 of the Data Sheet for format of Technical Proposal to be submitted, and paragraph 3.4 of Section 2 of the bidding documents for Standard Forms required and number of pages recommended.

TECH-1 Technical Proposal Submission Form

TECH-2 A Information Related To Experience

TECH-3 A: Team Composition and

B: Curriculum Vitae (CV) for Proposed Professional Staff

TECH-4 Approach & Methodology

FORM TECH-1 TECHNICAL PROPOSAL SUBMISSION FORM

	[Location, Date]
То:	[Name and address of Client]
Dear S	ir,
hereby	We, the undersigned, offer to provide Independent Compliance Auditing Services in ance with your bidding Document dated [<i>Insert Date</i>] and our Proposal. We are submitting our Proposal, which includes this Technical Proposal, and a Financial ral sealed under a separate envelope ¹ .
addres	We are submitting our Proposal in association with: [Insert a list with full name and s of each associated Firm] ²
true an	We hereby declare that all the information and statements made in this Proposal are d accept that any misinterpretation contained in it may lead to our disqualification.
negotia	If contract negotiations are held during the period of validity of the Proposal, i.e., the date indicated in Paragraph Reference 1.12 of the Data Sheet, we undertake to ate on the basis of the proposed staff. Our Proposal is binding upon us and subject to diffications resulting from Contract negotiations.
to the a	We undertake, if our Proposal is accepted, to initiate the consulting services related assignment not later than the date indicated in Paragraph Reference 7.2 of the Data
	We understand you are not bound to accept any Proposal you receive.
	We remain,
	Yours sincerely,
	Authorized Signature [In full and initials]: Name and Title of Signatory: Name of Firm: Address:

FORM TECH-2

INFORMATION RELATED TO EXPERIENCE FORM A

[Using the format below, provide information on each Service for which you, and each associate for this Independent Compliance Auditing Assignment, was legally contracted as a corporate entity for carrying out similar to the ones requested under this Assignment. Use maximum 2 pages. Please provide Client's certification and/or evidence of the contract agreement.]

Services name:	Value of the services (in current PKR):
Country:	Duration of services (months):
Location within country:	
Name of Client:	Total No. of staff-months (by your firm) on the services:
Start date (month/year):	Value of total services provided under an agreement (in current PKR)
Name of senior professional staff of your firm inv significant profiles such as staff:	volved and functions performed (indicate most
Narrative description of Services:	

Note:

- 1. Only the eligible services that satisfy criteria shall be included.
- 2. All the Financial numbers are to be given in Pak Rupees

(Signature of Authorized Signatory)

Applicant seal & stamp

FORM TECH-3 TEAM COMPOSITION

FORM A

An organogram of 3 staff is required. CVs of all essential staff members must be attached with the proposal. Minimum of the following staff is required.

Professional Staff					
Name of Staff	CNIC No./Passport No.	Firm	Area of Expertise	Position Assigned	Task Assigned

FORM B CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

CURRICULUM VITAE (CV) FOR PROFESSIONAL STAFF

l. Current Pos	ition [only one candidate sh	nall be nominated for each position]:
2. Name of Fire	m [Insert name of firm propo	osing the staff]:	
3. Name of Stat	ff [Insert full name]:		
I. Date of Birth	n:	Nationality:	
5. CNIC No (if	Pakistani):	or Passport No:	
6. Assignment	Experience:		
Sr. No	Description	Project Name	Year
Assignment 1			
Assignment 2			
Assignment 3			
. Education :			
Degree	Major	Institution	Year
. Membership	of Professional Associ	ations:	
Other Train	ing [Indicate significant tra	ining since degrees under 6 - Educ	ation were obtained]:

1.	[For each language indicate proj		peaking, reading, an
staff member since	ecord [Starting with present po graduation, giving for each empl organization, positions held.]:		
Client	Position	From (MM/YYYY)	To (MM/YYYY)
			/
	κs Assigned		
11. Detailed Tasl			
11. Detailed Tasl			
	be performed under this services	1	
	be performed under this services	7	
	be performed under this services	7	

12. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

	ng the assignments in which the staff has been involved, indicate the following information for services that best illustrate staff capability to handle the tasks listed under point 11.]
1)	Name of Services:
	Year:
	Location:
	Client:
	Main Services:
	Positions held:
	Activities performed:
13. Certifi	
describes	ersigned, certify that to the best of my knowledge and belief, this CV correctly myself, my qualifications, and my experience. I understand that any wilful ent described herein may lead to my disqualification or dismissal, if engaged.
Signature of	Date: **F staff member or authorized representative of the staff]** **Day/Month/Year** **Day/Month/Year
	of authorized representative:

TECHNICAL PROPOSAL (FORM -4)

APPROACH, METHODOLOGY, AND WORK PLAN

Form-4: a description of the approach, methodology and work plan for performing the assignment, including a detailed description of the proposed methodology and staffing for training, if the Terms of Reference specify training as a specific component of the assignment.

{Suggested structure of your Technical Proposal:

- a) Technical Approach and Methodology
- b) Work Plan
- a) <u>Approach and Methodology.</u> {Please explain your understanding of the objectives of the assignment as outlined in the Terms of Reference (TORs), the technical approach, and the methodology you would adopt for implementing the tasks to deliver the expected output(s), and the degree of detail of such output. <u>Please do not repeat/copy the TORs in here.</u>}
- b) <u>Work Plan.</u> {Please outline the plan for the implementation of the main activities/tasks of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and tentative delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing your understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents (including reports) to be delivered as final output(s) should be included here. The work plan should be consistent with the Work Schedule Form.}

Section 4: Financial Quotation - Standard Forms

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal according to the instructions provided under para. 3.6 of Section 2. Such Forms are to be used whichever is the selection method indicated in para. 4 of the Letter of Invitation.

FIN-1	Financial Quotation Submission Form
FIN-2	Summary of Costs
FIN-3	Break Down of Cost Activity

Break Down of Remuneration

FIN-4

FORM FIN-1 FINANCIAL QUOTATION SUBMISSION FORM

[Location, Date]

[Location, Date]
To: [Name and address of Client]
Dear Sir,
We, the undersigned, offer to provide Independent Compliance Auditing Services in accordance with your bidding Document dated [<i>Insert Date</i>] and our Technical Proposal. Our attached Financial Proposal is for the sum of [<i>Insert amount(s) in words and figures</i> ¹]. This amount is inclusive of the taxes.
Our Financial Quotation shall be binding upon us up to expiration of the validity period of the Proposal, i.e. before the date indicated in Paragraph Reference 1.12 of the Data Sheet.
No commissions or gratuities have been or are to be paid by us to agents relating to this Proposal and Contract execution.
We understand you are not bound to accept any Proposal you receive.
We remain,
Yours sincerely,
Authorized Signature [In full and initials]:
Name and Title of Signatory:
Name of Firm:
Address:

FORM FIN-2 SUMMARY OF COSTS

	Costs
Item	Pak Rupees
Total Costs of Financial Quotation ¹	

¹ Indicate the total costs, including of local taxes, to be paid by the Client in local currency. Such total costs must coincide with the sum of the relevant Subtotals indicated in all Forms FIN-3 provided with the Proposal.

FORM FIN-3 BREAKDOWN OF COSTS BY ACTIVITY¹

Group of Activities (Phase): ²	Description: ³
	Costs
Cost component	Pak Rupees
Remuneration ⁵	
Reimbursable Expenses ⁵	
Subtotals	

- Form FIN-3 shall be filled at least for the whole assignment. In case some of the activities require different modes of billing and payment (e.g.: the assignment is phased, and each phase has a different payment schedule), the Firm shall fill a separate Form FIN-3 for each group of activities. The sum of the relevant Subtotals of all Forms FIN-3 provided must coincide with the Total Costs of Financial Proposal indicated in Form FIN-2.
- 2 Names of activities (phase) should be the same as, or correspond to the ones indicated in the second column of Form TECH-8.
- 3 Short description of the activities whose cost breakdown is provided in this Form.
- 4 Indicate between brackets the name of the local currency.
- 5 Remuneration and Reimbursable Expenses must respectively coincide with relevant Total Costs indicated in Forms FIN-4, and FIN-5.

FORM FIN-4 BREAKDOWN OF REMUNERATION¹

Name ²	Position ³	Staff-month Rate ⁴
		[Home] [Field]

- 1 Form FIN-4 shall be filled in for the same Professional and Support Staff listed in Form TECH-7.
- Professional Staff should be indicated individually; Support Staff should be indicated per category (e.g.: draftsmen, clerical staff).
- 3 Positions of the Professional Staff shall coincide with the ones indicated in Form TECH-5.
- 4 Indicate separately staff-month rate and currency for home and fieldwork.

SECTION 5: TERMS OF REFERENCE

The independent auditing body is defined in the Contract between QA Solar and TBEA as per sub- clause 21.2 of Particular Conditions of the Contract.

21.2 Independent Compliance Audit

At least 28 days prior to the commencement of the O&M Works, the Employer and the Contractor shall jointly appoint the Auditing Body (Independent Consultant) to carry out an independent and impartial audit during the O&M Works. The terms of appointment of the Auditing Body (Independent Consultant) shall be mutually agreed between the Employer and the Contractor. The purpose will be to audit and monitor the performance of both the Employer and the Contractor during the O&M Works Period in compliance with the Employer's Requirements and the terms of the Contract. If the Parties cannot agree on the appointment of the Auditing Body (Independent Consultant), the matter shall be referred to the Chief Executive Officers of the Parties. Such person shall make the appointment and notify the Parties accordingly.

The Auditing Body (Independent Consultant) shall commence its duties on the same date as the O&M Works commences.

The remunerations to the Auditing Body (Independent Consultant) shall be shared equally and shall be mutually agreed upon by the Employer and the Contractor when agreeing the Terms of Appointment.

Both Parties shall cooperate with the Auditing Body (Independent Consultant) and give due regard to the matters raised in each report issued by the Auditing Body.

Apart from the above task, testing and calibrations are to be supervised/monitored by the same Auditing Body/Independent Party /3rd Party, as per contract between QA Solar and TBEA. The independent Auditing Body shall perform task as per the letter and spirit of the EPC and O&M Contract. These tasks include but not limited to the following task:

• Calibration of weather station as per EPC and O&M Agreement Clause ER 1.10.

1.10 **Meteorological Sensors**

1.10.1 Irradiation and temperature measurements are to be recorded at intervals of fifteen minutes or less. Particular care must be taken, that the measurement equipment fits to the environmental conditions of the area. The equipment should have the capability of recording and storing data for 24 hours using auxiliary DC power.

1.10.2 The irradiation measurement equipment should be calibrated by an independent certified third party at least every two years. The calibration must be traceable to international standards. Seven pyranometers shall be placed per

System: three for measuring the horizontal plane irradiation and the others for the in plane irradiation. The pyranometers should conform to the standards of ISO 9060 (SR5: secondary standard) or the WMO classification, and IEC 60904. Thermopile sensors are preferable to silicon photodiodes. A sensor calibration tolerance of within +1-2% is expected, given the importance of this measurement to the PR calculation adjustment. Contemporary best-in-class commercial specifications are shown in Schedule A. The ground based sensor data is to be supplemented with satellite data to quantify longer term variations (e.g., from NASA's Surface Meteorology and Solar Energy data set).

- 1.10.3 Ambient air and the module temperature shall be measured at every 5 installed MW_p in conformity with IEC 6075 I AA. Particular care shall be taken about the method of attaching the temperature sensor on the back of the module. The dependence of the System and sub-systems performance on temperature variations should be characterized by the SCADA.
- 1.10.4 A weather monitoring station at a minimum of four different locations per System shall be provided with redundant humidity sensors, a rain gauge, and a wind profiling unit/anemometer (speed and direction), preferably capable of data telemetry or other electronic connectivity to the SCADA server. The environmental analysis is important to understand any unexpected degradation effects in the modules or other system components.
- 1.10.5 The use of consolidated measuring equipment, supported by an integrated UPS, with the abovementioned functionality and modelling software capable of predictive functions will be required.

Any 3rd party cost on account of this calibration shall be payable by TBEA (O&M Contractor) on. 3rd party invoices duly certified by the Independent Auditing Body will be proof enough for the purpose of reimbursement.

• To determine the annual PR in terms of Clause 1.5.5

"The determination of the annual PR will be done by a qualified independent party which also operates the meteorological stations in the plant."

 The on-site monitoring as per Clause 2.9 shall be monitored by the Independent Auditing Body on a continuous basis for reliable measurements and analysis of performance.

2.9 Onsite Monitoring

Note: The data of irradiation sensors shall be monitored by an independent expert on a continuous basis for reliable measuring data/or analysis of performance

• To determine the amount of Liquidated Damages for Shortfall Energy in terms of Clause 1.4.5

While the Applicant is performing the O&M and the annual measured PR falls below the guaranteed PR value according to Table 1.3.1, the liquidated damages

will be levied on the successful Applicant at the rate of USD 0.20-per-kWh or the kWh Value the Employer receives for each kWh of shortfall whichever is higher. Adjustments shall be made for any events outside the control of the O&M operator as grid outages, from grid operator ordered shutdowns, or force majeure events during the year. In case the PR is higher than the guaranteed PR value, the net value of this excess energy will be shared as follows:

- *i.* 50% towards the asset replacement fund
- ii. 25% towards the Employer
- iii. 25% towards the O&M contractor

For timely compensation the above procedure will be carried out provisionally for each quarter whereby the contractor and employer might jointly agree on different PR values for each quarter. In the last quarter of each calendar year the annual PR compensation of the full year will be carried out and any provisions will be offset by the annual compensation.

• To determine the amount of Liquidated Damages in case O&M Contractor defaults to provide the O&M services in terms of Clause 1.4.6

If the successful Applicant defaults in being able to provide the O&M services required for the Systems performance guarantee, then it will be liable to cover all costs — but at least in the amount of LDs imposed to the Employer by its PPA agreements - incurred by the Employer, including the loss of the guaranteed electricity export to the grid (but at a minimum rate of USD 0.20-per-kWh) for the disrupted period, in finding and hiring a replacement for the purpose.

1. Scope of Work

The Scope of work of the Consulting Firm shall, *inter alia*, include:

- (a) To review and ensure the Calibration of Pyranometers in terms of EPC and O&M Agreement.
- (b) Independent Audit of the performance of Employer and Contractor.
- (c) To review the Down Time requests by TBEA and approve the same after thorough confirmation.
- (d) To make independent and impartial determinations for the technical disputes between QASPPL and TBEA.

2. Deliverables

- (a) Monthly & quarterly Technical Audit Report of performance of Contractor (TBEA) and Company (QASP) inclusive of daily cleaning status of Pyranometers, daily PR and approved down time.
- (b) Quarterly Report of Performance Ratio inclusive of provisional determination of Liquidated Damages/Bonus calculations
- (c) Annual Report of Performance Ratio inclusive of final determination of Liquidated Damages/Bonus calculations by offsetting the provisional determinations.

(d) Any other report as assigned by Client based on any emergent plant situation.

3. Reporting Arrangement

The selected Auditing body shall report to the Chief Executive Officers of the Client and Contractor or any other officer designated by the same.

4. Core Team of Experts

The Team of the Consultant shall consist of the following key experts who have qualifications as stipulated below:

All engineers hired locally must be registered with the Pakistan Engineering Council (PEC).

• Solar Resource Specialist/Analyst

- Conversant with latest PV technologies and trends of Operations and maintenance of utility scale solar power plants.
- O Capable to provide technical opinion in line with international engineering standards and best engineering practices.
- More than 5 years of experience in photovoltaic system technology and power systems.
- Have expertise in developing and implementing Monitoring & Evaluation templates and protocols for Operation and maintenance of renewable power projects
- o At least a Bachelor Engineering degree in Electrical/Electronics.

• Contract Specialist

- O Conversant with Contract Management of Power plants.
- Capable to provide contractual opinion in line with EPC and O&M Agreement.
- More than 5 years of experience in Contract Management of Power Plants.
- At least a Bachelor Engineering degree in Electrical/Electronics, Mechanical.

• Resident Engineer/Coordinator

- At least bachelor degree in field of Electrical/Electronic Engineering.
- Having good communication skills for reporting and proper coordination with Back-office technical experts.
- O Capable to properly interpret SCADA system in Control room and review the hourly/daily reports to analyze the system health.
- Capable to manage and coordinate the site meetings for operational issues.

• At least 02 years of experience in solar power plants.

5. Duration of the Consultancy Services

• Twelve (12) months.

6. Estimated Cost

• PKR 02 million

7. Payment

Payment to the Consultant shall be made in 12 equal monthly instalments upon submission of report.