



REQUEST FOR PROPOSAL (RFP)

Procurement of Consulting Firm

For

SURVEY FOR ELECTRICITY CONUMPTION & SAVING POTENTIAL OF PUBLIC INSTITUTES

PUNJAB ENERGY EFFICIENCY AND CONSERVATION AGENCY, ENERGY DEPARTMENT, GOVERNMENT OF THE PUNJAB

Single Stage Two Envelope (In-line with PPRA Rules 2014)

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Punjab Energy Efficiency & Conservation Agency, Energy Department, Govt. of the Punjab, Lahore







TABLE OF CONTENTS

PART I – SELECTION PROCEDURE

| PART II – DRAFT CONTRACT | 46 |
|--|----|
| Section 5. Terms of Reference (TORs) | 37 |
| Section 4. Financial Proposal – Forms | |
| Section 3. Technical Proposal – Forms | 23 |
| Section 2. ITC Data Sheet (with Evaluation Criteria) | 18 |
| Section 1. Instructions to Consultant (ITC) | 3 |





PART I

Section 1. Instructions to Consultant (ITC)

A. General Provisions

1. Definitions

- (a) "Affiliate(s)" means an individual or an entity that directly or indirectly controls, is controlled by, or is under common control with the Consultant.
- (b) "Applicable Rules" means the Punjab Procurement Rules 2014 (amended) governing the selection and Contract award process as set forth in this RFP.
- (c) "Applicable Law" means the laws of Islamic Republic of Pakistan, as they may be issued and in force from time to time.
- (d) "Client" means the procuring agency that signs the Contract for the Services with the selected Consultant.
- (e) "Consultant" means a legally-established professional consulting firm or an entity that may provide or provides the Services to the Client under the Contract.
- (f) "Contract" means a legally binding written agreement signed between the Client and the Consultant and includes all the attached documents listed in its Clause 1 (the General Conditions of Contract (GCC), the Special Conditions of Contract (SCC), and the Appendices).
- (g) "Data Sheet" means an integral part of the Instructions to Consultant (ITC) Section 2 that is used to reflect specific conditions to supplement assignment, but not to over-write, the provisions of the ITC.
- (h) "Day" means a calendar day.
- (i) "Experts" means, collectively, Key Experts, Non-Key Experts, or any other personnel of the Consultant, Subconsultant or Joint Venture member(s).
- (j) "Government" means the Government of the Punjab.
- (k) "Joint Venture (JV)" means an association with or without a legal personality distinct from that of its members, of more than one Consultant where one member has the authority to conduct all business for and on behalf of any and all the members of the JV, and where the members of





- the JV are jointly and severally liable to the Client for the performance of the Contract.
- (l) "Key Expert(s)" means an individual professional whose skills, qualifications, knowledge and experience are critical to the performance of the Services under the Contract and whose CV is taken into account in the technical evaluation of the Consultant's proposal.
- (m)"ITC" (this Section 2 of the RFP) means the Instructions to Consultant that provides the shortlisted Consultants with all information needed to prepare their Proposals.
- (n) "LOI" (this Section 1 of the RFP) means the Letter of Invitation being sent by the Client to the shortlisted Consultants.
- (o) "Non-Key Expert(s)" means an individual professional provided by the Consultant or its Sub-consultant and who is assigned to perform the Services or any part thereof under the Contract and whose CVs are not evaluated individually.
- (p) "Proposal" means the Technical Proposal and the Financial Proposal of the Consultant.
- (q) "RFP" means the Request for Proposals to be prepared by the Client for the selection of Consultants.
- (r) "Services" means the work to be performed by the Frim pursuant to the Contract.
- (s) "Sub-consultant" means an entity to whom the Consultant intends to subcontract any part of the Services while remaining responsible to the Client during the performance of the Contract.
- (t) "TORs" (this Section 6 of the RFP) means the Terms of Reference that explain the objectives, scope of work, activities, and tasks to be performed, respective responsibilities of the Client and the Consultant, and expected results and deliverables of the assignment.

2. Introduction

2.1 The Client named in the **Data Sheet** intends to select a Consultant from those listed in the Letter of Invitation, in accordance with the method of selection specified in the **Data Sheet**.





- 2.2 The shortlisted Consultants are invited to submit a Technical Proposal and a Financial Proposal, or a Technical Proposal only, as specified in the **Data Sheet**, for consulting services required for the assignment named in the **Data Sheet**. The Proposal will be the basis for negotiating and ultimately signing the Contract with the selected Consultant.
- 2.3 The Consultants should familiarize themselves with the local conditions and take them into account in preparing their Proposals, including attending a pre-proposal conference if one is specified in the **Data Sheet**. Attending any such pre-proposal conference is optional and is at the Consultants' expense.
- 2.4 The Client will timely provide, at no cost to the Consultants, the inputs, relevant project data, and reports required for the preparation of the Consultant's Proposal as specified in the **Data Sheet**.

3. Conflict of Interest

- 3.1 The Consultant is required to provide professional, objective, and impartial advice, at all times holding the Client's interests paramount, strictly avoiding conflicts with other assignments or its own corporate interests, and acting without any consideration for future work.
- 3.2 The Consultant has an obligation to disclose to the Client any situation of actual or potential conflict that impacts its capacity to serve the best interest of its Client. Failure to disclose such situations may lead to the disqualification of the Consultant or the termination of its Contract and/or sanctions by the Procuring Agency.
 - 3.2.1 Without limitation on the generality of the foregoing, and unless stated otherwise in the **Data Sheet**, the Consultant shall not be hired under the circumstances set forth below:

a. Conflicting activities

(i) Conflict between consulting activities and procurement of goods, works or non-consulting services: a Consultant that has been engaged by the Client to provide goods, works, or non-consulting services for a project, or any of its Affiliates, shall be disqualified from providing consulting services resulting from or directly related to those goods, works, or non-consulting services. Conversely, a Consultant hired to provide consulting services for the preparation or implementation of a project, or any of its Affiliates, shall be disqualified from subsequently providing goods or works or non-consulting services resulting from or directly related to the





consulting services for such preparation or implementation.

b. Conflicting assignments

(ii) Conflict among consulting assignments: A Consultant (including its Experts and Sub-consultants) 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 Consultant for the same or for another Client.

c. Conflicting relationships

(iii) Relationship with the Client's staff: a Consultant (including its Experts and Sub-consultants) that has a close business or family relationship with a professional staff of the Client who are directly or indirectly involved in any part of (i) the preparation of the Terms of Reference for the assignment, (ii) the selection process for the Contract, or (iii) the 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 Procuring Agency the selection process and the execution of the Contract.

4. Unfair Competitive Advantage

4.1 Fairness and transparency in the selection process require that the Consultants or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided services related to the assignment in question. To that end, the Client shall indicate in the **Data Sheet** and make available to all shortlisted Consultants together with this RFP all information that would in that respect give such Consultant any unfair competitive advantage over competing Consultants.

5. Corrupt and Fraudulent Practices

- 5.1 (a) For the purpose of this provision, the terms set forth below are defined as follows:
 - (i) "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official, bidder or contractor in the procurement process or in contract execution to the detriment of the procuring agency; or misrepresentation of facts in order to influence a procurement process or the execution of a contract;
 - (ii) "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;





- (iii) "collusive practices" is an arrangement among bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels for any wrongful gain, and to deprive the procuring agency of the benefits of free and open competition, and any request for, or solicitation of anything of value by any public official in the course of the exercise of his duty;
- (iv) "coercive practices" is impairing or harming, or threatening to impair or harm, directly or indirectly, any person or the property of the person (participant in the selection process or contract execution) to influence improperly the actions of that person;
- (v) "obstructive practice" is deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements before investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or acts intended to materially impede the exercise of the Client's inspection and audit rights.
- (b) The Client will reject a proposal for award if it determines that the Consultant recommended for award or any of its personnel, or its agents, or its sub-consultants, sub-contractors, services providers, suppliers, and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- (c) The Client will declare mis procurement if it determines at any time that its representatives were engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the selection process or the implementation of the contract in question;
- (d) The Client will sanction a Consultant at any time, in accordance with prevailing sanctions procedures, including by publicly declaring such Consultant ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Government-financed contract, and (ii) to be a nominated sub-consultant, supplier, or

¹ A nominated sub-consultant, supplier, or service provider is one which has been either (i) included by the firm in its proposal because it brings specific and critical experience and know-how that are accounted for in the technical evaluation of the firm's proposal for the particular services.





service provider of an otherwise eligible Consultant being awarded a Government-financed contract.

5.2 In further pursuance, Consultant shall permit and shall cause its agents, Experts, Sub-consultants, sub-contractors, services providers, or suppliers to permit the Procuring Agency to inspect all accounts, records, and other documents relating to the submission of the Proposal and contract performance (in case of an award), and to have them audited by auditors appointed by the Procuring Agency.

6. Eligibility

- 6.1 The Procuring Agency permits Consultants and their individual members to offer services.
- 6.2 Furthermore, it is the Consultant's responsibility to ensure that its Experts, agents (declared or not), service providers, suppliers and/or their employees meet the eligibility requirements as established in the Applicable Rules.
- 6.3 As an exception to the foregoing Clauses 6.1 and 6.2 above:

a. Sanctions

6.3.1 A Consultant sanctioned by the Government in accordance with the above Clause 5.1 shall be ineligible to be awarded a contract, or otherwise, during such period of time as the Government shall determine. The list of debarred/blacklisted Consultants is available at the electronic address specified in the **Data Sheet**.

b. Prohibitions

6.3.2 Consultants and individuals of a country or goods manufactured in a country may be ineligible if so indicated in Section 5 (Eligibility).

c. Governmentowned Enterprises

6.3.3 Government-owned enterprises or institutions shall be eligible if they (i) are legally and financially autonomous, and (ii) operate under commercial law.

d. Restrictions for public employees

- 6.3.4 Government officials and civil servants of the are not eligible to be included as Experts in the Consultant's Proposal unless such engagement does not conflict with any employment or other laws, regulations, or policies of the country, and they
- (i) are on leave of absence without pay, or have resigned or retired;





(ii) are not being hired by the same agency they were working for before going on leave of absence without pay, resigning, or retiring

(in case of resignation or retirement, for a period of at least 6 (six) months, or the period established by statutory provisions applying to civil servants or government employees, whichever is longer. Experts who are employed by the government-owned universities, educational or research institutions are not eligible unless they have been full time employees of their institutions for a year or more prior to being included in Consultant's Proposal.; and

(iii) their hiring would not create a conflict of interest.

B. Preparation of Proposals

- 7. General Considerations
- 7.1 In preparing the Proposal, the Consultant is expected to examine the RFP in detail. Material deficiencies in providing the information requested in the RFP may result in rejection of the Proposal.
- 8. Cost of Preparation of Proposal
- 8.1 The Consultant shall bear all costs associated with the preparation and submission of its Proposal, and the Client shall not be responsible or liable for those costs, regardless of the conduct or outcome of the selection process. 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 Consultant.
- 9. Language
- 9.1 The Proposal, as well as all correspondence and documents relating to the Proposal exchanged between the Frim and the Client, shall be written in the language(s) specified in the **Data Sheet**.
- 10. Documents Comprising the Proposal
- 10.1 The Proposal shall comprise the documents and forms listed in the **Data Sheet**.
- 10.2 If specified in the **Data Sheet**, the Consultant shall include a statement of an undertaking to observe, in competing for and executing a contract, laws against fraud and corruption (including bribery).
- 10.3 The Consultant shall furnish information on commissions, gratuities, and fees, if any, paid or to be paid to agents or any other





party relating to this Proposal and, if awarded, Contract execution, as requested in the Financial Proposal submission form (Section 4).

11. Only One Proposal

11.1 The Consultant shall submit only one Proposal, either in its own name. If a Consultant member, submits or participates in more than one proposal, all such proposals shall be disqualified and rejected.

12. Proposal Validity

- 12.1 **The Data Sheet** indicates the period during which the Consultant's Proposal must remain valid after the Proposal submission deadline.
- 12.2 During this period, the Consultant shall maintain its original Proposal without any change, including the availability of the Key Experts, the proposed rates and the total price.
- 12.3 If it is established that any Key Expert nominated in the Consultant's Proposal was not available at the time of Proposal submission or was included in the Proposal without his/her confirmation, such Proposal shall be disqualified and rejected for further evaluation and may be subject to sanctions in accordance with Clause 5 of this ITC.

a. Extension of Validity Period

- 12.4 The Client will make its best effort to complete the negotiations within the proposal's validity period. However, should the need arise, the Client may request, in writing, all Consultants who submitted Proposals prior to the submission deadline to extend the Proposals' validity.
- 12.5 If the Consultant agrees to extend the validity of its Proposal, it shall be done without any change in the original Proposal and with the confirmation of the availability of the Key Experts.
- 12.6 The Consultant has the right to refuse to extend the validity of its Proposal in which case such Proposal will not be further evaluated.

b. Substitution of Key Experts at Validity Extension

12.7 If any of the Key Experts become unavailable for the extended validity period, the Consultant shall provide a written adequate justification and evidence satisfactory to the Client together with the substitution request. In such case, a replacement Key Expert shall have equal or better qualifications and experience than those of the originally proposed Key Expert. The technical evaluation score, however, will remain to be based on the evaluation of the CV of the original Key Expert.





12.8 If the Consultant fails to provide a replacement Key Expert with equal or better qualifications, or if the provided reasons for the replacement or justification are unacceptable to the Client, such Proposal will be rejected.

c. Sub-Contracting

12.9 The Consultant shall not subcontract the whole of the Services.

13. Clarification and Amendment of RFP

- 13.1 The Consultant may request a clarification of any part of the RFP during the period indicated in the **Data Sheet** before the Proposals' submission deadline. 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, and will send written copies of the response (including an explanation of the query but without identifying its source) to all shortlisted Consultants. If the Client deems it necessary to amend the RFP as a result of a clarification, it shall do so following the procedure described below:
 - 13.1.1 At any time before the proposal submission deadline, the Client may amend the RFP by issuing an amendment in writing or by standard electronic means. The amendment shall be sent to all shortlisted Consultants and will be binding on them. The shortlisted Consultants shall acknowledge receipt of all amendments in writing.
 - 13.1.2 If the amendment is substantial, the Client may extend the proposal submission deadline to give the shortlisted Consultants reasonable time to take an amendment into account in their Proposals.
- 13.2 The Consultant may submit a modified Proposal or a modification to any part of it at any time prior to the proposal submission deadline. No modifications to the Technical or Financial Proposal shall be accepted after the deadline.

14. Preparation of Proposals – Specific Consideration

- 14.1 While preparing the Proposal, the Consultant must give particular attention to the following:
 - 14.1.1 If a shortlisted Consultant considers that it may enhance its expertise for the assignment by associating with other Consultants in the form of a Joint Venture or as Subconsultants, it may do so with either (a) non-shortlisted Consultant(s), or (b) shortlisted Consultants if permitted in the **Data Sheet**. In all such cases a shortlisted Consultant must obtain the written approval of the Client prior to the submission of the Proposal. When associating with non-shortlisted Consultants in the form of a joint venture or a sub-





consultancy, the shortlisted Consultant shall be a lead member. If shortlisted Consultants associate with each other, any of them can be a lead member.

- 14.1.2 The Client may indicate in the **Data Sheet** the estimated Key Experts' time input (expressed in personmonth) or the Client's estimated total cost of the assignment, but not both. This estimate is indicative and the Proposal shall be based on the Consultant's own estimates for the same.
- 14.1.3 If stated in the **Data Sheet**, the Consultant shall include in its Proposal at least the same time input (in the same unit as indicated in the **Data Sheet**) of Key Experts, failing which the Financial Proposal will be adjusted for the purpose of comparison of proposals and decision for award in accordance with the procedure in the **Data Sheet**.

15. Technical Proposal Format and Content

- 15.1 The Technical Proposal shall not include any financial information. A Technical Proposal containing material financial information shall be declared non-responsive.
 - 15.1.1 Consultant shall not propose alternative Key Experts. Only one CV shall be submitted for each Key Expert position. Failure to comply with this requirement will make the Proposal non-responsive.
- 15.2 Depending on the nature of the assignment, the Consultant is required to submit a Full Technical Proposal (FTP), or a Simplified Technical Proposal (STP) as indicated in the **Data Sheet** and using the Standard Forms provided in Section 3 of the RFP.

16. Financial Proposal

16.1 The Financial Proposal shall be prepared using the Standard Forms provided in Section 4 of the RFP. It shall list all costs associated with the assignment, including (a) remuneration for Key Experts and Non-Key Experts, (b) reimbursable expenses indicated in the **Data Sheet**.

a. PriceAdjustment

- 16.2 For assignments with a duration exceeding 18 months, a price adjustment provision for local inflation for remuneration rates applies if so stated in the **Data Sheet**.
- b. Taxes
- 16.3 The Consultant is responsible for meeting all tax liabilities arising out of the Contract unless stated otherwise in the **Data Sheet**.

b. Currency of Proposal

16.4 The Consultant may express the price for its Services in the currency or currencies as stated in the **Data Sheet**. If indicated in





the **Data Sheet**, the portion of the price representing local cost shall be stated in the national currency.

d. Currency of Payment

16.5 Payment under the Contract shall be made in the currency or currencies in which the payment is requested in the Proposal.

C. Submission, Opening and Evaluation

17. Submission, Sealing, and Marking of Proposals

- 17.1 The Consultant shall submit a signed and complete Proposal comprising the documents and forms in accordance with Clause 10 (Documents Comprising Proposal). The submission can be done by mail or by hand. If specified in the **Data Sheet**, the Consultant has the option of submitting its Proposals electronically.
- 17.2 An authorized representative of the Consultant shall sign the original submission letters in the required format for both the Technical Proposal and, if applicable, the Financial Proposals and shall initial all pages of both. The authorization shall be in the form of a written power of attorney attached to the Technical Proposal.
 - 17.2.1 A Proposal submitted by a Joint Venture shall be signed by all members so as to be legally binding on all members, or by an authorized representative who has a written power of attorney signed by each member's authorized representative.
- 17.3 Any modifications, revisions, interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Proposal.
- 17.4 The signed Proposal shall be marked "ORIGINAL", and its copies marked "COPY" as appropriate. The number of copies is indicated in the **Data Sheet**. All copies shall be made from the signed original. If there are discrepancies between the original and the copies, the original shall prevail.
- 17.5 The original and all the copies of the Technical Proposal shall be placed inside of a sealed envelope clearly marked "TECHNICAL PROPOSAL", "Hiring of Consultancy Firm for SURVEY FOR ELECTRICITY CONUMPTION & SAVING POTENTIAL OF PUBLIC INSTITUTES ", reference number, name and address of the Consultant, and with a warning "DO NOT OPEN UNTIL OCTOBER 21, 2020 BEFORE 02:30 PM."





- 17.6 Similarly, the original Financial Proposal (if required for the applicable selection method) shall be placed inside of a sealed envelope clearly marked "FINANCIAL PROPOSAL" followed by the name of the assignment, reference number, name and address of the Consultant, and with a warning "DO NOT OPEN WITH THE TECHNICAL PROPOSAL."
- 17.7 The sealed envelopes containing the Technical and Financial Proposals shall be placed into one outer envelope and sealed. This outer envelope shall bear the submission address, RFP reference number, the name of the assignment, Consultant's name and the address, and shall be clearly marked "Do NOT OPEN BEFORE "02:30 PM ON 21-OCTOBER-2020".
- 17.8 If the envelopes and packages with the Proposal are not sealed and marked as required, the Client will assume no responsibility for the misplacement, loss, or premature opening of the Proposal.
- 17.9 The Proposal or its modifications must be sent to the address indicated in the **Data Sheet** and received by the Client no later than the deadline indicated in the **Data Sheet**, or any extension to this deadline. Any Proposal or its modification received by the Client after the deadline shall be declared late and rejected, and promptly returned unopened.

18. Confidentiality

- 18.1 From the time the Proposals are opened to the time the Contract is awarded, the Consultant should not contact the Client on any matter related to its Technical and/or Financial Proposal. Information relating to the evaluation of Proposals and award recommendations shall not be disclosed to the Consultants who submitted the Proposals or to any other party not officially concerned with the process, until the publication of the Contract award information.
- 18.2 Any attempt by shortlisted Consultants or anyone on behalf of the Consultant to influence improperly the Client in the evaluation of the Proposals or Contract award decisions may result in the rejection of its Proposal and may be subject to the application of prevailing Government's sanctions procedures.
- 18.3 Notwithstanding the above provisions, from the time of the Proposals' opening to the time of Contract award publication, if a Consultant wishes to contact the Client on any matter related to the selection process, it should do so only in writing.





19. Opening of Technical Proposals

- 19.1 The Client's evaluation committee shall conduct the opening of the Technical Proposals in the presence of the Consultants' authorized representatives who choose to attend (in person). The opening date, time and the address are stated in the **Data Sheet**. The envelopes with the Financial Proposal shall remain sealed and shall be securely stored with a reputable public auditor or independent authority until they are opened in accordance with Clause 23 of the ITC.
- 19.2 At the opening of the Technical Proposals the following shall be read out: (i) the name and the country of the Consultant; (ii) the presence or absence of a duly sealed envelope with the Financial Proposal; (iii) any modifications to the Proposal submitted prior to proposal submission deadline; and (iv) any other information deemed appropriate or as indicated in the **Data Sheet**.

20. Proposals Evaluation

- 20.1 Subject to provision of Clause 15.1 of the ITC, the evaluators of the Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded.
- 20.2 The Consultant is not permitted to alter or modify its Proposal in any way after the proposal submission deadline except as permitted under Clause 12.7 of this ITC. While evaluating the Proposals, the Client will conduct the evaluation solely on the basis of the submitted Technical and Financial Proposals.

21. Evaluation of Technical Proposals

21.1 The Client's evaluation committee shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference and the RFP, applying the evaluation criteria, sub-criteria, and point system specified in the **Data Sheet**. Each responsive Proposal will be given a technical score. A Proposal shall be rejected at this stage if it does not respond to important aspects of the RFP or if it fails to achieve the minimum technical score indicated in the **Data Sheet**.

22. Public Opening of Financial Proposals (for QCBS and LCS methods)

22.1 After the technical evaluation is completed, the Client shall notify those Consultants whose Proposals were considered non-responsive to the RFP and TOR or did not meet the minimum qualifying technical score (and shall provide information relating to the Consultant's overall technical score, as well as scores obtained for each criterion and sub-criterion) that their Financial Proposals will be returned unopened after completing the selection process and Contract signing. The Client shall simultaneously notify in writing those Consultants that have achieved the minimum overall technical score and





inform them of the date, time and location for the opening of the Financial Proposals. The opening date should allow the Consultants sufficient time to make arrangements for attending the opening. The Consultant's attendance at the opening of the Financial Proposals (in person, or online if such option is indicated in the **Data Sheet**) is optional and is at the Consultant's choice.

22.2 The Financial Proposals shall be opened by the Client's evaluation committee in the presence of the representatives of those Consultants whose proposals have passed the minimum technical score. At the opening, the names of the Consultants, and the overall technical scores, including the break-down by criterion, shall be read aloud. The Financial Proposals 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. Copies of the record shall be sent to all Consultants who submitted Proposals.

23. Correction of Errors

23.1 Activities and items described in the Technical Proposal but not priced in the Financial Proposal, shall be assumed to be included in the prices of other activities or items, and no corrections are made to the Financial Proposal.

a. Time-Based Contracts

23.1.1 If a Time-Based contract form is included in the RFP, the Client's evaluation committee will (a) correct any computational or arithmetical errors, and (b) adjust the prices if they fail to reflect all inputs included for the respective activities or items in the Technical Proposal. In case of discrepancy between (i) a partial amount (sub-total) and the total amount, or (ii) between the amount derived by multiplication of unit price with quantity and the total price, or (iii) between words and figures, the former will prevail. In case of discrepancy between the Technical and Financial Proposals in indicating quantities of input, the Technical Proposal prevails and the Client's 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 to the corrected quantity, and correct the total Proposal cost.

b. Lump-Sum Contracts

23.2 If a Lump-Sum contract form is included in the RFP, the Consultant is deemed to have included all prices in the Financial Proposal, so neither arithmetical corrections nor price adjustments shall be made. The total price, net of taxes understood as per Clause ITC 25 below, specified in the





Financial Proposal (Form FIN-1) shall be considered as the offered price.

- 24. Taxes
- 24.1 The Client's evaluation of the Consultant's Financial Proposal shall include all applicable taxes in accordance with the instructions in the **Data Sheet**.
- 25. Single Currency
- 25.1 For the evaluation purposes, prices shall be in single currency in PKR Rupees indicated in the **Data Sheet**.

26. Combined Quality and Cost Evaluation

- a. Quality- and Cost-Based Selection (QCBS)
- 26.1 In the case of QCBS, the total score is calculated by weighting the technical and financial scores and adding them as per the formula and instructions in the **Data Sheet**. The Consultant achieving the highest combined technical and financial score will be invited for negotiations.
- b. Least-Cost Selection
- 26.2 In the case of Least-Cost Selection (LCS), the Client will select the Consultant with the lowest evaluated total price among those Consultants that achieved the minimum technical score and invite such Consultant to negotiate the Contract.
- c. Quality Based Selection
- 26.3 In the case of Quality Based Selection (QBS), the Client will select the Consultant that submitted the highest-ranked Technical Proposal and invite such Consultant to negotiate the Contract.
- 27. Award of Contract
- 27.1 After completing the negotiations, the Client shall sign the Contract; publish the award information as per the instructions in the **Data Sheet**; and promptly notify the other shortlisted Consultants.
- 27.2 The Consultant is expected to commence the assignment on the date and at the location specified in the **Data Sheet**.





Section 2. Instructions to Consultant (ITC)

E. Data Sheet

| | A. General |
|-------------------------|--|
| ITC Clause Reference | |
| 2.1 | Name of the Client: Punjab Energy Efficiency and Conservation Agency |
| | Method of Selection: Quality & Cost Based Selection (QCBS) |
| 2.2 | The name of the assignment is: "HIRING OF CONSULTANCY FIRM FOR SURVEY FOR ELECTRICITY CONUMPTION & SAVING POTENTIAL OF PUBLIC INSTITUTES" |
| | Financial Proposal to be submitted together with Technical Proposal in a separate sealed envelope. |
| 2.3 | A pre-proposal conference will not be held. |
| 2.4 | The TORs are provided in the Section 5 Description of services to facilitate the preparation of the Proposals . |
| 6.3.1 | A list of debarred/blacklisted Consultants is available at PPRA's website: www.ppra.punjab.gov.pk |
| | B. Preparation of Proposals |
| 9.1 | This RFP has been issued in the <u>English</u> language. Proposals shall be submitted in <u>English</u> language. All correspondence exchange shall be in <u>English</u> language. |
| 10.1 | The Proposal shall comprise of Technical and Financial Proposals, each sealed separately, both enclosed in one common envelope. |
| | TECHNICAL PROPOSAL: |
| | a. Power of Attorney to sign the Proposal b. Form-1 c. Form-2 d. Form-3 |





| e. Form-4 f. Form-5 |
|--|
| 1. 10IIII-3 |
| AND |
| FINANCIAL PROPOSAL: (1) Form-1 (2) Form-2 And documents related to evaluation criteria specified in BDS |
| Statement of Undertaking is required. |
| One Consultant one proposal, Multiple proposals are NOT permissible |
| Proposals must remain valid for 180 days. |
| Clarifications may be requested no later than 3 days prior to the submission deadline. The contact information for requesting clarifications is: Manager Legal Address: Punjab Energy and Conservation Agency,48-A, Ghalib Road, C-II, Gulberg III, Lahore Tel: +92-42-99268362-3 Ext 112 Fax- +92-42-99268364 Email: peeca.qu@energy.punjab.gov.pk |
| Shortlisted Consultant shall NOT associate with other Shortlisted or Non-shortlisted Consultant(s) at RFP stage . |
| Submission of the Technical Proposal in a wrong format may lead to the Proposal being deemed non-responsive to the RFP requirements. |
| Consultant's will pay all applicable taxes |
| The Consultant will be paid in Pakistani Rupee (PKR). |
| C. Submission, Opening and Evaluation |
| The Consultants shall NOT have the option of submitting their Proposals electronically . |
| The Consultant must submit: (a) Technical Proposal: one (1) original, and two2 (2) copies (b) Financial Proposal: one (1) original |
| |





| 17.7 and 17.9 | The Proposals must be submitted no later than: | | | | | | | | | |
|------------------|---|--|---------------------------------|--|--|--|--|--|--|--|
| | Date: 21-October-2020 Time: 02:00 PM | | | | | | | | | |
| | On the outer sealed envelope mark the warning marking ("Do not open before 21-October-2020 before 02:30 PM) | | | | | | | | | |
| | The Proposal submission ac Ghalib road, Gulberg III, I | | 8-A, Block CII, | | | | | | | |
| 19.1 | The opening shall take place at: PEECA Office 48-A, Block CII, Ghalib road, Gulberg III, Lahore Date: 21-October-2020. Time: 02:30 PM | | | | | | | | | |
| 19.2 | No online option of the ope The following information Technical Proposal: The na Submission Form-1, and pres | will be read aloud at the ames of Consultants, duly sign | opening of the gned Proposal | | | | | | | |
| 21.1 | Criteria, sub-criteria, and point system for the evaluation of the Technical Proposals: | | | | | | | | | |
| | Item | Description | Marks | | | | | | | |
| | The firm must not be | | | | | | | | | |
| | blacklisted by any national/international or donor agency. | Declaration on stamp Paper must be provided | Qualifying Criteria | | | | | | | |
| | national/international or donor agency. The Firm/ Company/ Consultant must have registration with the following. a. Registration of PST & NTN. | <u> </u> | | | | | | | | |
| | national/international or donor agency. The Firm/ Company/ Consultant must have registration with the following. a. Registration of | Paper must be provided Mandatory for | Criteria | | | | | | | |





| | (ii)Civil Engineer /Relevant (1) | i. 10 ii. 5 |
|----------------------------|--|---|
| Personnel Capabilities | (iii)Electrical Engineer (2) (iv)HVAC Expert (1) (v)Technician (2) * Qualification and Experience Carry 50% marks each | iii. 10 (Each Carry 5 Marks) iv. 5 v. 5 (Each Carry 2.5 Marks) Sub-Total: 35 |
| Finance | PKR 20 Million average financial turnover for the last 3 financial years. (Audited Statements must be Provided) | 10 (3 to 10 Million 3 Marks) (10 to 20 Million 7 Marks) (Above 20 Million 10 Marks) |
| Methodology & Work Plan | Adequacy of the proposed technical approach, Methodology and work plan in responding to the Terms of Reference | 20 Work Plan (10 Marks) Methodology (10 Marks) |
| Total | 100 | |

The number of points to be assigned to each of the above positions or disciplines shall be

determined considering the following two sub-criteria and relevant percentage weights:

- 1) General Qualification [40%]
- 2) Adequacy for the assignment [60%]

Total points for the two criteria: 100

The Minimum Technical score St required to pass is: 65 points





| | The Formula for determining the financial scores is the following: Sf = 100 x Fm / F, in which Sf is the financial score, Fm is the lowest Price and F the Price of the proposal under Consideration. The Weights given to the Technical (T) and Financial Proposal (F) are: T = 0.8 (Technical Proposal 80%) and F = 0.2 (Financial Proposal 20%) Total score= T+F |
|------|---|
| 23.1 | No online option of the opening of the Financial Proposals is offered |
| 25.1 | Financial Proposal shall include all applicable taxes, which includes Income Tax and Sales Tax. The Client shall act as a withholding agent as required by Income Tax Ordinance, as enforced. |
| | D. Award |
| 27.1 | The publication of the contract award information will be published online: www.ppra.punjab.gov.pk |
| 27.2 | Expected date for the commencement of the Consultancy Services: Seven (07) days after contract signing, following confirmation of Key Experts' availability to start the Assignment, which shall be submitted to the Client in writing as a written statement signed by each Key Expert. |





Section 3. Technical Proposal – Standard Forms

{Notes to Consultant shown in brackets {} throughout Section 3 provide guidance to the Consultant to prepare the Technical Proposal; they should not appear on the Proposals to be submitted.}

CHECKLIST OF REQUIRED FORMS

| Required (√) | FORM | DESCRIPTION | Page Limit |
|-----------------|------------|--|------------|
| ٧ | 1 | Technical Proposal Submission Form. | |
| "√ "If | 1 | If the Proposal is submitted by a joint venture, | |
| applicable | Attachment | attach a letter of intent or a copy of an existing | |
| | | agreement. | |
| "√" If | Power of | No pre-set format/form. In the case of a Joint | |
| applicable | Attorney | Venture, several are required: a power of | |
| | | attorney for the authorized representative of | |
| | | each JV member, and a power of attorney for | |
| | | the representative of the lead member to | |
| | | represent all JV members | |
| √ | 2 | Consultant's Organization and Experience. | |
| ٧ | 3 | Description of the Approach, Methodology, and | |
| | | Work Plan for Performing the Assignment | |
| V | 4 | Work Schedule and Planning for Deliverables | |
| ٧ | 5 | Team Composition, Key Experts Inputs, and | |
| | | attached Curriculum Vitae (CV) | |

All pages of the original Technical and Financial Proposal shall be initialled by the same authorized representative of the Consultant who signs the Proposal.





TECHNICAL PROPOSAL (FORM -1)

PROPOSAL SUBMISSION FORM

[Date]

To: Manager Legal Punjab Energy Efficiency and Conservation Agency (PEECA) 48-A, Ghalib Road, Gulberg III, Lahore

Dear Sir/Madam:

We, the undersigned, offer to provide the consulting services for "HIRING OF CONSULTANCY FIRM FOR SURVEY FOR ELECTRICITY CONUMPTION AND SAVING POTENTIAL OF PUBLIC INSTITUTES" in accordance with your Request for Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal and a Financial Proposal sealed in a separate envelope.

We hereby declare that:

- (a) All the information and statements made in this Proposal are true and we accept that any misinterpretation or misrepresentation contained in this Proposal may lead to our disqualification by the Client and/or may be sanctioned by the Procuring Agency.
- (b) Our Proposal shall be valid and remain binding upon us for the period of time specified in the Data Sheet, Clause 12.1.
- (c) We have no conflict of interest in accordance with ITC 3.
- (d) We meet the eligibility requirements as stated in ITC 6, and we confirm our understanding of our obligation to abide by the policy in regard to corrupt and fraudulent practices as per ITC 5.
- (e) [Note to Client: In competing for (and, if the award is made to us, in executing) the Contract, we undertake to observe the laws against fraud and corruption, including bribery.]



Punjab Energy Efficiency & Conservation Agency, Energy Department, Govt. of the Punjab, Lahore



(f) Our Proposal is binding upon us and subject to any modifications resulting from the Contract negotiations.

We undertake, if our Proposal is accepted and the Contract is signed, to initiate the Services related to the assignment no later than the date indicated in Clause 27.2 of the Data Sheet.

We understand that the Client is not bound to accept any Proposal that the Client receives.

| We remain, | |
|--|--|
| Yours sincerely, | |
| Authorized Signature {In full and initials}: | |
| Name and Title of Signatory: | |
| Name of Consultant: | |
| In the capacity of: | |
| Address: | |
| Contact information (phone and e-mail): | |





TECHNICAL PROPOSAL (FORM -2) ORGANIZATION AND EXPERIENCE

Form-3: a brief description of the Consultant's organization and an outline of the recent experience of the Consultant that is most relevant to the assignment. In the case of a joint venture, information on similar assignments shall be provided for each partner. For each assignment, the outline should indicate the names of the Consultant's Key Experts and Sub-consultants who participated, the duration of the assignment, the contract amount (total and, if it was done in a form of a joint venture or a sub-consultancy, the amount paid to the Consultant), and the Consultant's role/involvement.

A – Consultant's Organization

- 1. Provide here a brief description of the background and organization of your company, and in case of a joint venture of each member for this assignment.
- 2. Include organizational chart, a list of Board of Directors, and beneficial ownership

B – Consultant's Experience

- 1. List only previous <u>similar</u> assignments successfully completed in the last **5 years**.
- 2. List only those assignments for which the Consultant was legally contracted by the Client as a company or was one of the joint venture partners. Assignments completed by the Consultant's individual experts working privately or through other Consultants cannot be claimed as the relevant experience of the Consultant, or that of the Consultant's partners or sub-consultants, but can be claimed by the Experts themselves in their CVs. The Consultant should be prepared to substantiate the claimed experience by presenting copies of relevant documents and references if so requested by the Client.

| Name of Client | Assignment name/& brief description of main deliverables/outputs | Role in the Assignment | Duration | Contract value |
|----------------|--|---------------------------|----------|-------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |





TECHNICAL PROPOSAL (FORM -3)

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.

- 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>}
- c) Work Plan. {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.}

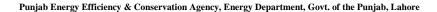




TECHNICAL PROPOSAL (FORM -4) TIME SCHEDULE

| | Deliverables ¹ (D) | Months | | | | | | | | | | | |
|-----|--|--------|---|---|---|---|---|---|---|---|---|---|-------|
| N° | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | n | TOTAL |
| D-1 | {e.g., Deliverable #1: Report A | | | | | | | | | | • | | |
| | 1) data collection | | | | | | | | | | | | |
| | 2) drafting | | | | | | | | | | | | |
| | 3) report | | | | | | | | | | | | |
| | 4) incorporating comments | | | | | | | | | | | | |
| | 5) | | | | | | | | | | | | |
| | 6) delivery of final report to Client} | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| D-2 | {e.g., Deliverable #2:} | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | _ | | | | | | | | | | | |
| n | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |







- 1 List the deliverables with the breakdown for activities required to produce them and other benchmarks such as the Client's approvals. For phased assignments, indicate the activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in a form of a bar chart.
- 3. Include a legend, if necessary, to help read the chart.



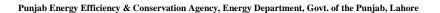


TECHNICAL PROPOSAL (FORM -5) TEAM COMPOSITION

{Please describe the structure and composition of your team, including the list of the Key Experts, Non-Key Experts and relevant technical and administrative support staff.}

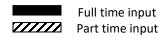
| N° | Name | Expert's | s input | (in person | /month) pe | er each Deliv | verable (lis | sted in TECH-5 | 5) | Total ti | ime-inpu | ıt |
|-------|----------------|------------------|-------------------|----------------------|----------------|---------------|--------------|-------------------|----------|----------|----------|-------|
| | | Position | | D-1 | D-2 | D-3 | | D | | Home | Field | Total |
| KEY I | EXPERTS | • | • | <u> </u> | • | | | • | | 1 | | |
| K-1 | {e.g., Mr. Ab} | [Team Leader] | [Home] [Field] | [2 month] [0.5 m] | [1.0] [2.5] | [1.0] | | | | | | |
| K-2 | | , | [] | [11 6.0] | [2.3] | [0] | | | | | | |
| | | | | | | | | | \dashv | | | |
| K-3 | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| n | | | | | | | | | | | | |
| | | | | | | | | Subtotal | | | | |
| NON | -KEY EXPERTS | | | | | | | 1 | | -1 | <u> </u> | 1 |
| N-1 | | | [Home] [Field] | | | | | | | | | |
| N-2 | | | [] | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| n | | | ļ | | | | | | | | | |
| | | | | | | | | Subtotal Total | | | | |







- For Key Experts, the input should be indicated individually for the same positions as required under the Data Sheet ITC21.1.
- 2 Months are counted from the start of the assignment/mobilization. One (1) month equals twenty two (22) working (billable) days. One working (billable) day shall be not less than eight (8) working (billable) hours.
- 3 "Home" means work within the Client's city. "Field" work means work carried out outside the Client's city of residence.







TECHNICAL PROPOSAL (FORM -5 CONTINUED)

CURRICULUM VITAE (CV)

| | tle and No. | _ | |
|--|---|--|--|
| Name of E | - | | |
| Date of Bir | | | |
| Country of | Citizenship/Residence | | |
| Education | : | | |
| reverse ord types of act previous cl | er. Please provide dates, name tivities performed and location | e of employing or n of the assignmention(s) who can be | e contacted for references. Past |
| Period | Employing organization and title/position. Contact information references | Summary of activities performed relevant to the Assignment | |
| | nip in Professional Association | | |
| Language | Skills (indicate only languag | es in which you o | can work): |
| Adequacy | for the Assignment: | | |
| Detailed Experts: | Tasks Assigned on Consulta | nt's Team of | Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks |
| | eliverables/tasks as in Form-5 ll be involve} | in which the | |



(the same who signs the Proposal)

Punjab Energy Efficiency & Conservation Agency, Energy Department, Govt. of the Punjab, Lahore



| describes myself, my qualificate assignment in case of an aw | at to the best of my knowle ations, and my experience, and ard. I understand that any many disqualification or dismissa | dge and belief, this CV correctly and I am available to undertake the misstatement or misrepresentational by the Client, and/or sanctions by |
|--|---|--|
| | | {day/month/year} |
| Name of Expert | Signature | Date |
| | | {day/month/year} |
| Name of authorized Representative of the Consultant | Signature | Date |





Section 4. Financial Proposal - Standard Forms

{*Notes to Consultant* shown in brackets { } provide guidance to the Consultant to prepare the Financial Proposals; they should not appear on the Financial Proposals to be submitted.}

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal according to the instructions provided in Section 2.

Form-1 Financial Proposal Submission Form

Form-2 Summary of Costs





FORM F-1 FINANCIAL PROPOSAL SUBMISSION FORM





FORM F-2 SUMMARY OF COSTS

| | Cost | |
|---|---|--|
| ll and | {Consultant must state the proposed Costs in accordance with Clause 16.4 of the Data Sheet} | |
| Item | {Local Currency} | |
| Total Cost of the Financial Proposal: {Should match the amount in Form F-1} | | |





Section 5. Terms of Reference (TORs)

HIRING OF CONSULTANCY SERVICES FOR SURVEY FOR ELECTRICITY CONUMPTION AND SAVING POTENTIAL OF PUBLIC INSTITUTES

Introduction:

Government of the Punjab has established Punjab Energy Efficiency and Conservation Agency (PEECA) that aims to enforce policies/standards on provincial level to meet the objectives that are in synchrony with the Federal Energy Efficiency & Conservation (EE&C) Objectives. The Agency also intends to manage the behavioral changes & public awareness programs to facilitate the achievement of its objectives, and host training programs for the masses and private sector personnel to create a culture of energy conservation, and carry out the study to indicate the major areas for promotion of EE&C.

PEECA (Punjab Energy Efficiency and Conservation Agency) was established with the aim to bridge the demand and supply gap through efficiency at user end. Punjab being the most populated province, consumes more than 62 % of the country's electricity production, it is important to take measures in order to reduce load on the national grid. With the aim to decrease the gap in supply and demand, PEECA has initiated the energy audit program. The target of this program is to find the energy conservation potentials in these institutes and then implementation of Energy Conservation Recommendations (ECRs) to lower the net demand of energy.

Objectives:

The main objective of PEECA's energy audit project is to lower energy consumption and promulgate energy conservation approaches in Punjab in order to reduce burden on national grid; to assess the energy needs and efficiency of institutes/facilities and propose a comprehensive action plan after completion of energy audit, such as retrofitting of inefficient appliances with their efficient alternatives and solarization of rooftops of the respective public institutes; and to provide this action plan in the form of a detailed report to guide the government institutes to save energy, reduce operating costs and minimize the impact on the environment.

Scope of Work:

PEECA intends to conduct Energy Audits of 40 Public Sector Institutes by hiring services of Consulting Firms/Companies/Institutions. The following aspects but not limited to, are to be covered while performing the Energy Audits of the public institutes.

- 1. PEECA expects the firm/company/consultant to include all the necessary matters of information in the reports. Analyze and comment on patterns and trends in seasonal energy consumption
- 2. The Consulting Firms/Companies/Institutions shall meet with the client to develop;
 - a) an approved schedule and time to access each institution
 - b) Identify the areas and equipment that will be inspected.
 - c) Describe the method and equipment that will be inspected.
 - d) The number of interviews to be conducted, and
 - e) The tentative duration of each institution inspection.





- 3. Analyze the historical energy consumption (minimum past two years) and establish an energy baseline and annualized costs
- 4. Analyze and comment on patterns and trends in seasonal energy consumption
- 5. Review energy meters and list with reference to site energy end use. Review tariff structure and provide breakdown between peak and off peak. Provide aggregated tariff structure including all taxes and surcharges of the respective institute to be used for savings analysis. Identify appropriate opportunities in peak/load shifting.
- 6. Describe the site's energy using systems and operation & maintenance procedures
- 7. Install loggers on nominated sites. Data loggers are to collect data for parameters such as Power (Real and Reactive), Voltage (V), Current (I), Harmonics (Total Harmonic Distortion, THD %), Energy Consumption (kWh) and Maximum Demand Induction (MDI). The data is to be recoded on daily basis as well as hourly basis, and separate documentation of this information should be generated.
- 8. PEECA expects that the audit reports submitted should include: Overall load summary of the government institute; department/building Wise load summary of the institute; and Appliance Wise Load summary of the same institute i.e. list of all types of indoor and outdoor lights, fans, types of air conditioners installed, etc. is to be included.
- 9. Evaluate the institution envelope, characterize the institution usage and type of construction.
- 10. Surveys, measurements, photographs and other data collection methods shall be performed in a way that it minimizes disruption to the institution occupants.
- 11. Instruments utilized should include Lux Meters, Air flow Meters, Power analyzer and Loggers, Digital Multimeters, Clamp Meters, Thermal Imager and Infrared Thermometers and/or similar equipment with valid calibration certificates. Detail for equipment and system inspected using these instruments should also be provided. Note temperatures, pressures and other key parameters where applicable
- 12. The electrical measurement should include electricity consumption profile in order to identify improvements needed to reduce consumption. Voltage, current, active power and energy, reactive and distorting power and reactive energy, and power factor calculations is expected to be included in the study.
- 13. The recommended but not limited to lights, fans, HVAC system, pumps/motors and other electrical appliances are to be included as well.
- 14. Solar PV Potential, its expected capital investment and expected saving potential per annum of the institution is considered a vital part of the energy audit study. On the basis of this information, Solarization of rooftops of public institutions will be done as an alternate source of energy source. On-Grid Solar PV Design using Helioscope, PVSyst or a similar software is to be used for detailed analysis including shading factor of the obstacles on rooftop. Since it is a clean energy source, the reduction in Green House Gases (GHG) is also made a part of the energy audits study.
- 15. Details regarding Generators installed in the public institute as well as Transformer detail is required since that would help calculate Generator Set (Gen-Set) and fuel consumption calculations. The overall cost saving should also be calculated.
- 16. The information gathered from energy assessment is to be used to introduce energy conservation methods and retrofit appropriate energy saving technologies. Identify and





- list all opportunities to reduce energy consumption, costs, payback period, energy savings and greenhouse gas emissions.
- 17. Load reduction as well as expected costs of electrical appliances is to be included individually, summarizing current loads, retrofitted loads as well payback period.
- 18. The energy assessment will help the user to determine the purchase of and improvements in the electrical appliances to save energy and money.
- 19. Capital cost estimates based on energy savings in to be included. Capital Expenditure (CAPEX) which must include appliance cost, installation cost and disposal cost of old appliances in case of retrofitting, GST and Income Tax keeping in view the public procurement process based on cost estimates taken from local market from renowned brand and must be annexed in the energy audit report. Also, provide financial analysis such as IRR, payback, benefit-cost ratio, NPV, etc.

4. Budget

The estimated price of this tender is PKR 5 Million including all applicable taxes.

5. Duration

Overall duration of the assignment is expected to be of **06 Months** from the date of the signing of agreement with the Firm/Company/Consultant.

Note: The firm/company/consultant must provide detailed time-frame schedule/Work Plan for completion of assignment in the Methodology-Technical Proposal.

6. Deliverables

The Firms/Companies/Consultants shall be required to fulfill the following reporting requirements:

| Sr. | Deliverables | Copies | Payment Ps (Including all |
|-----|---|-----------------|-----------------------------|
| No. | Denverables | (Hard and Soft) | Rs (Including all Taxes) |
| 1. | Inception Report including Energy Audit template, strategy, methodology of analysis, signed time sheet of each person and schedule of work (after signing of the Contract) | 3+1 | 10% |
| 2. | NINE (9) percent of the lump-sum amount shall be paid upon completion of survey of electricity consumption and saving potential of four (4) public institutes followed by furnishing and approval of the Report. | 3+1 | 9% |
| 3. | NINE (9) percent of the lump-sum amount shall be paid upon completion of survey of electricity consumption and saving potential | 3+1 | 9% |





| | of four (4) public institutes followed by | | |
|-----|---|-------|-----|
| | furnishing and approval of the Report. | | |
| | NINE (9) percent of the lump-sum amount | | |
| | shall be paid upon completion of survey of | | |
| | electricity consumption and saving potential | 3+1 | 9% |
| | | 3+1 | 9% |
| 1 | of four (4) public institutes followed by | | |
| 4. | furnishing and approval of the Report. | | |
| | NINE (9) percent of the lump-sum amount | | |
| | shall be paid upon completion of survey of | 2 . 1 | 00/ |
| | electricity consumption and saving potential | 3+1 | 9% |
| _ | of four (4) public institutes followed by | | |
| 5. | furnishing and approval of the Report. | | |
| | NINE (9) percent of the lump-sum amount | | |
| | shall be paid upon completion of survey of | 2 1 | 00/ |
| | electricity consumption and saving potential | 3+1 | 9% |
| | of four (4) public institutes followed by | | |
| 6. | furnishing and approval of the Report. | | |
| | NINE (9) percent of the lump-sum amount | | |
| | shall be paid upon completion of survey of | | |
| | electricity consumption and saving potential | 3+1 | 9% |
| | of four (4) public institutes followed by | | |
| 7. | furnishing and approval of the Report. | | |
| | NINE (9) percent of the lump-sum amount | | |
| | shall be paid upon completion of survey of | | |
| | electricity consumption and saving potential | 3+1 | 9% |
| | of four (4) public institutes followed by | | |
| 8. | furnishing and approval of the Report. | | |
| | NINE (9) percent of the lump-sum amount | | |
| | shall be paid upon completion of survey of | | |
| | electricity consumption and saving potential | 3+1 | 9% |
| | of four (4) public institutes followed by | | |
| 9. | furnishing and approval of the Report. | | |
| | NINE (9) percent of the lump-sum amount | | |
| | shall be paid upon completion of survey of | | |
| | electricity consumption and saving potential | 3+1 | 9% |
| | of four (4) public institutes followed by | | |
| 10. | furnishing and approval of the Report. | | |
| | NINE (9) percent of the lump-sum amount | | |
| | shall be paid upon completion of survey of | | |
| | electricity consumption and saving potential | 3+1 | 9% |
| | of four (4) public institutes followed by | | |
| 11. | furnishing and approval of the Report. | | |

Note: Provide 3 copies of the survey of electricity consumption and saving potential of public institutes Report at each phase of the project to the Project Manager. Also, provide 2 CDs of the final approved report and all of the contents with any drawings in ".dwg" (native file format for AutoCAD)





Position, Qualification and Experience of Core team:

The consulting team must have the personnel with the following qualification and experiences;

| S. No | Key Professional | No. Of Persons | Qualification | Experience |
|----------|--|-------------------|---|---|
| 1. | Project Manager | 01 | Masters in Electrical Engineering or similar field | Relevant experience of 5 years and more in relevant field |
| 2. | Civil Engineer/Relevant | 01 | Bachelors in Civil Engineering with PEC certification | Relevant experience of 3 years in civil field |
| 3. | Electrical Engineer | 02 | Bachelors in Electrical Engineering with PEC certification | Relevant experience of 3 years |
| 4. | HVAC Expert having relevant experience | 01 | Bachelors in Electrical/Mechanical Engineering with PEC certification | Relevant experience of 3 years |
| 5. | Technicians | 02 | Diploma in Electrical/Mechanical/HVAC | Relevant experience of 2 years |

7. Reporting Arrangements

- 1. The Firm/Company/Consultant shall report to Program Manager, PEECA for the said Services.
- 2. All documentation, reports shall be submitted in the English Language.
- 3. All the data, documents and reports produced by the Firm/Company/Consultant for the said services shall be the property of the PEECA. The Firm/Company/Consultant shall not share and use these data, document and reports for any other purpose / job without the explicit written approval of Managing Director, PEECA.
- 4. In case the Firm/Company/Consultant fails to fulfill the contractual obligations and violate the contract agreement, the contract agreement shall be terminated and Firm/Company/Consultant shall not be liable to make any pending claims.





Annexure A

SURVEY OF ELECTRICITY CONSUMPTION AND SAVING POTENTIAL OF PUBLIC INSTITUTES REPORT FORMAT

Based on the results of the Energy Audit findings, the Consultant shall prepare Energy Audit Report that incorporates the following elements:

1. Table of Contents

Provide a table of contents and page numbers for the Energy Audit Report.

2. Executive Summary

Include a brief introduction to the facility and a description of the project objective and overall conclusions and recommendations of the Energy Audit.

3. Institution / Facility Information

- i. Provide a general background description of the facility along with the pictures and geo tagging, Institution components, mechanical systems, electrical systems, automation systems, and operational profiles and schedules. A description of the Institution envelope, age and construction history, number of employees, occupancy patterns, and a discussion of the O&M program shall be included.
- ii. The Institution information section shall also contain relevant photos of the facility, Institutions, and mechanical systems, a description of energy types used, and a description of the primary mechanical systems and controls.

2. Utility Summary

Provide energy accounting information for a minimum of one year, as well as selected charts and graphs that will demonstrate the overall energy demand trend and usage patterns of the facility or Institution.

3. Measurements & Observations

Provide specific measurements such as temperature, relative humidity, light levels, air flows, etc. where appropriate. Also, relevant observations shall be noted such as damper positions, operating deficiencies, control settings, damaged equipment, maintenance shortfalls, etc.





Energy Conservation Measures

- i. Provide a narrative summary for each recommended ECM that meets the objective of this project scope of work. Provide the estimated cost, estimated savings, simple payback, and other data for each ECM in the required Energy Conservation Measure. The description of each ECM shall also include the following information following this Energy Conservation Measure:
- ii. A one or two-page description of each ECM and supporting calculations.
- iii. No-cost measures such as adjusting equipment, control systems, or schedules shall be addressed first.
- iv. Energy use and savings calculations and economic analysis.
- v. Assumptions that were made regarding operation or equipment efficiency.
- vi. Estimated installation cost, including cost of all equipment and materials, and source of cost estimate.
- vii. Estimated energy savings (in energy specific volume units).
- viii. Estimated annual energy cost savings based on current historical energy costs of the facility.
 - ix. Estimated annual operating cost savings, including reductions in maintenance expense.
 - x. Estimated lifetime energy cost savings.
 - xi. Simple payback.
- xii. Options for funding the installation of recommended measures.
- xiii. Equipment standards that must be used in the design, procurement, and installation of all ECM"s such as ASHRAE 90.1, ASHRAE 155P etc.

4. Renewable/Distributed Energy Measures

Recommend any viable renewable/distributed energy technologies such as solar power, wind power, geothermal systems, etc., which could be cost effectively, implemented for the facility.

5. Cost Estimates





The cost to implement each ECM shall be estimated and presented in an appendix of the report. A table shall be included that identifies costs associated with each improvement. The Information and cost data will be used to make decisions on facility planning and yearly capital appropriation requests.

- i. Each ECM cost estimate shall include:
- ii. Narrative explanation of the work, including diagrammatic sketches if required to explain the work.
- iii. List of assumptions made in compiling the estimate.
- iv. Cost of demolition of existing systems, if applicable.
- v. Cost of impact of facility operations on ECM implementation (work restrictions).





PART II DRAFT CONTRACT





CONTRACT

Consultant's Services

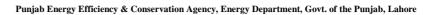
LUMP-SUM





Contents

| <u>I.</u> | Form of C | Contract |
|-----------|-------------------|--|
| II. | General | Conditions of Contract. |
| | 1. Gene | ral Provisions |
| | | |
| | $\frac{1.1}{1.2}$ | <u>Definitions</u> Law Governing Contract |
| | $\frac{1.2}{1.3}$ | Language. |
| | $\frac{1.5}{1.4}$ | Notices |
| | 1.5 | Location |
| | 1.6 | Authority of Member in Charge |
| | <u>1.7</u> | Authorized Representatives |
| | <u>1.8</u> | <u>Taxes and Duties</u> |
| | <u>1.9</u> | Fraud and Corruption |
| | 2. Com | mencement, Completion, Modification and Termination of Contract |
| | 2.1 | Effectiveness of Contract |
| | $\frac{2.1}{2.2}$ | Commencement of Services |
| | $\frac{2.2}{2.3}$ | Expiration of Contract. |
| | $\frac{2.5}{2.4}$ | Modifications or Variations |
| | $\frac{2.5}{2.5}$ | Force Majeure |
| | 2.6 | <u>Termination</u> |
| | 3. Oblig | rations of the Consultant |
| | 3.1 | General |
| | $\frac{3.1}{3.2}$ | Conflict of Interests. |
| | $\frac{3.2}{3.3}$ | Confidentiality |
| | 3.4 | Insurance to be Taken Out by the Consultant |
| | 3.5 | Consultant's Actions Requiring Client's Prior Approval |
| | 3.6 | Reporting Obligations |
| | <u>3.7</u> | Documents Prepared by the Consultant to be the Property of the Client |
| | <u>3.8</u> | Accounting, Inspection and Auditing |
| | 4. Cons | ultant's Personnel |
| | 4.1 | Description of Personnel |
| | $\frac{1.1}{4.2}$ | Removal and/or Replacement of Personnel |
| | | gations of the Client |
| | | |
| | <u>5.1</u> | Assistance and Exemptions. Change in the Applicable Law Palated to Taxes and Duties |
| | <u>5.2</u> 5.3 | Change in the Applicable Law Related to Taxes and Duties |
| |) | 1701 VICOU MILL I MOTITEIO J |







| 6. Payments to the Consultant | •••• |
|---|------|
| 6.1 Lump-Sum Payment | |
| 6.2 Contract Price. | |
| 6.3 Payment for Additional Services | |
| 6.4 Terms and Conditions of Payment | |
| 6.5 Indemnity | |
| <u>6.5</u> <u>Penalties</u> | |
| 6.6 Indemnity | |
| | |
| 7. Good Faith | |
| 7.1 Good Faith | |
| 8. Settlement Of Disputes | |
| 8.1 Amicable Settlement | |
| 8.2 Dispute Resolution | |
| III. Special Conditions of Contract | |
| IV. Appendices | |
| | |
| Appendix A – Description of Services | |
| Appendix B - Reporting Requirements | •••• |
| Appendix C - Key Personnel and Sub-Consultants | |
| Appendix D – Services and Facilities Provided by the Client | |





CONTRACT FOR CONSULTANTS' SERVICES

LUMP-SUM

BETWEEN

PUNJAB ENERGY EFFICIENCY AND CONSERVATION AGENCY (The Client)

| AND | |
|------------------|----|
| [| _] |
| (The Consultant) | |
| | |
| | |
| Dated: [1.2020 | |





Contract

(ON LUMP-SUM BASIS)

| This CONTRACT (hereinafter called the "Contract") is enter | red into onof |
|--|-------------------------|
| October, 2020, between Punjab Energy Efficiency and Cons | ervation Agency (PEECA) |
| (hereinafter called the "Client") and | (hereinafter called the |
| "Consultant"). | |

WHEREAS

- (a) the Client has requested the Consultant to provide certain consulting services as defined in this Contract (hereinafter called the "Services"):
- (b) the Consultant, having represented to the Client that it has the required professional skills, and personnel and technical resources, has agreed to provide the Services on the terms and conditions set forth in this Contract:

NOW THEREFORE the Parties hereby agree as follows:

- 1. The following documents attached hereto shall be deemed to form an integral part of this Contract:
 - (a) The General Conditions of Contract:
 - (b) The Special Conditions of Contract;
 - (c) The following Appendices:

Appendix A: Description of Services;

Appendix B: Reporting Requirements;

Appendix C: Key Personnel and Sub-Consultants;

Appendix D: Services and Facilities Provided by the Client.

- 2. The mutual rights and obligations of the Client and the Consultant shall be as set forth in this Contract, in particular:
 - (a) the Consultants shall carry out the Services in accordance with the provisions of this Contract; and
 - (b) the Client shall make payments to the Consultants in accordance with the provisions of this Contract.





IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first written above.

For and on behalf of

Punjab Energy Efficiency and Conservation Agency (PEECA)

| Signature | : | |
|-----------|------------------------|--|
| Name: | Mr. Abdur Rehman | |
| Title: | | |
| For and o | n behalf of sultant | |
| Signature | : | |
| Name: | | |
| Title: | | |
| | | |
| Witnesses | s: | |
| 1 | | |
| 2 | | |





II. General Conditions of Contract

1. GENERAL PROVISIONS

1.1 Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) "Applicable Law" means the laws and any other instruments having the force of law in the Government's country, or in such other country as may be specified in the Special Conditions of Contract (SC), as they may be issued and in force from time to time.
- (b) "Consultant" means any private or public entity that will provide the Services to the Client under the Contract.
- (c) "Contract" means the Contract signed by the Parties and all the attached documents listed in its Clause 1, that is these General Conditions (GC), the Special Conditions (SC), and the Appendices.
- (d) "Contract Price" means the price to be paid for the performance of the Services, in accordance with Clause 6;
- (e) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Clause GC 2.1.
- (f) "Foreign Currency" means any currency other than the currency of the Client's country.
- (g) "GC" means these General Conditions of Contract.
- (h) "Government" means the Government of the Client's country.
- (i) "Local Currency" means the currency of the Client's country.
- (j) "Member" means any of the entities that make up the joint venture/consortium/association, and "Members" means all these entities.
- (k) "Party" means the Client or the Consultant, as the case may be, and "Parties" means both of them.
- (l) "Personnel" means persons hired by the Consultant or by any Sub-Consultants and assigned to the performance of the Services or any part thereof.





- (m)"SC" means the Special Conditions of Contract by which the GC may be amended or supplemented.
- (n) "Services" means the work to be performed by the Consultant pursuant to this Contract, as described in Appendix A hereto.
- (o) "Sub-Consultants" means any person or entity to whom/which the Consultant subcontracts any part of the Services.
- (p) "In writing" means communicated in written form with proof of receipt.

1.2 Law Governing Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.

1.3 Language

This Contract has been executed in the language specified in the SC, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

1.4 Notices

1.4.1

Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent to such Party at the address specified in the SC.

1.4.2

A Party may change its address for notice hereunder by giving the other Party notice in writing of such change to the address specified in the SC.

1.5 Location

The Services shall be performed at such locations as are specified in Appendix A hereto and, where the location of a particular task is not so specified, at such locations, whether in the Government's country or elsewhere, as the Client may approve.

1.6 Authority of Member in Charge

In case the Consultant consists of a joint venture/consortium/ association of more than one entity, the Members hereby authorize the entity specified in the SC to act on their behalf in exercising all the Consultant's rights and obligations towards the Client under this Contract, including without limitation the receiving of instructions and payments from the Client. Payments made to the authorized entity specified in the SC shall be deemed to have been made to all the Members forming part of the joint venture/consortium/association and no claim shall be made to the Client in this regard.





1.7 Authorized Representatives

Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract by the Client or the Consultant may be taken or executed by the officials specified in the SC.

1.8 Taxes and Duties

The Consultant, Sub-Consultants, and their Personnel shall pay such indirect taxes, duties, fees, and other impositions levied under the Applicable Law as specified in the SC, the amount of which is deemed to have been included in the Contract Price.

1.9 Fraud and Corruption

If the Client determines that the Consultant and/or its Personnel, sub-contractors, sub-consultants, services providers and suppliers has/have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices, in competing for or in executing the Contract, then the Client may, after giving 14 days' notice to the Consultant, terminate the Consultant's employment under the Contract, and the provisions of Clause 2 shall apply as if such expulsion had been made under Sub-Clause 2.6.1(c).

Should any Personnel of the Consultant be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Contract, then that Personnel shall be removed in accordance with Sub-Clause 4.2.

1.9.1 Definitions

For the purposes of this Sub-Clause, the terms set-forth below are defined as follows:

- (i) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party²;
- (ii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party³;
- (iii) "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party⁴;
- (iv) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation⁵;

²A "party" refers to a participant in the selection process or contract execution.

³"Parties" refers to participants in the selection process (including public officials) attempting to establish bid prices at artificial, non-competitive levels.

⁴"Another party" refers to a public official acting in relation to the selection process or contract execution. In this context, "public official" includes staff and employees of other organizations taking or reviewing procurement decisions.

⁵A "party" refers to a public official; the terms "benefit" and "obligation" relate to the selection process or contract execution; and the "act or omission" is intended to influence the selection process or contract execution.





1.9.2 Measures to be Taken

will prohibit/impose restriction on the Consultant, including declaring the Consultant ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the Consultant has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a contract;

1.9.3 Commissions and Fees

The Client will require the successful Consultant to disclose any commissions or fees that may have been paid or are to be paid to agents, representatives, or commission agents with respect to the selection process or execution of the contract. The information disclosed must include at least the name and address of the agent, representative, or commission agent, the amount and currency, and the purpose of the commission or fee.

2. COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT

2.1 Effectiveness of Contract

This Contract shall come into effect on the date the Contract is signed by both Parties or such other later date as may be stated in the SC. The date the Contract comes into effect is defined as the Effective Date.

2.2 Commencement of Services

The Consultant shall begin carrying out the Services not later than the number of days after the Effective Date specified in the SC.

2.3 Expiration of Contract

Unless terminated earlier pursuant to Clause GC 2.6 hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the SC.

2.4 Modifications or Variations

Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any proposals for modification or variation made by the other Party.

2.5 Force Majeure

2.5.1 Definition

For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

2.5.2 No Breach of Contract

The failure of a Party to fulfill any of its obligations under the Contract shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry





out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

2.5.3 Extension of Time

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended proportionately for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure. The Consultant shall be liable to carry out the part of the Services which remain unaffected from the Event of Force Majeure.

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultant shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services.

2.6 Termination

2.6.1 By the Client

The Client may terminate this Contract in case of the occurrence of any of the events specified in paragraphs (a) through (f) of this Clause GC 2.6.1. In case of an occurrence of events specified in paragraphs (a) to (d) and (f) of this Clause the Client shall give not less than thirty (30) calendar days' written notice of termination to the Consultant, and sixty (60) calendar days' in the case of the event referred to in (e).

- (a) If the Consultant does not remedy a failure in the performance of their obligations under the Contract, within thirty (30) days after being notified or within any further period as the Client may have subsequently approved in writing in its sole discretion;
- (b) If the Consultant becomes insolvent or bankrupt;
- (c) If the Consultant, in the judgment of the Client has engaged in corrupt or fraudulent practices in competing for or in executing the Contract:
- (d) If, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days;
- (e) If the Client, in its sole discretion and for any reason whatsoever, decides to terminate this Contract;
- (f) If the Consultant fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause GC 8 hereof.





2.6.2 By the Consultant

The Consultant may terminate this Contract, by not less than thirty (30) days' written notice to the Client, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (c) of this Clause GC 2.6.2, and sixty (60) calendar days' in the case of the event referred to in (d) below:

- (a) If the Client fails to pay any money due to the Consultants for the Services rendered under the Contract which payment is not subject to dispute pursuant to Clause GC 7 hereof within forty-five (45) working days after receiving written notice from the Consultant that such payment is overdue. If the undisputed payment is made during the said period the Consultant shall not be entitled to terminate the Contract;
- (b) If, as the result of Force Majeure, the Consultants is/are unable to perform a material portion of the Services for a period of not less than sixty (60) days;
- (c) If the Client fails to comply with any final decision reached as a result of arbitration pursuant to Clause GC 8 hereof;
- (d) If the Consultant, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.

2.6.3 Payment upon Termination

Upon termination of this Contract pursuant to Clauses GC 2.6.1 or GC 2.6.2, the Client shall make the following payments to the Consultant:

- (a) payment pursuant to Clause GC 6 for Services satisfactorily performed prior to the effective date of termination;
- (b) except in the case of termination pursuant to paragraphs (a) through (d), and (f) of Clause GC 2.6.1, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract, including the cost of the return travel of the Personnel and their eligible dependents.

3. OBLIGATIONS OF THE CONSULTANT

3.1 General

3.1.1 Standard of Performance

The Consultant shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. In the event that the Consultant fails to adhere to these quality standards, the Consultant shall incur a penalty as provided for under Clause 6.5.





The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Client, and shall at all times support and safeguard the Client's legitimate interests in any dealings with Sub-Consultants or third Parties.

The Consultant shall be responsible for all the acts and deeds of the Sub-Consultants. The Client shall have no obligations under the Contract towards the Sub-Consultants and/or the third parties for any claim or demand arising out of the Services and/or this Contract.

3.2 Conflict of Interests

The Consultant shall hold the Client's interests paramount, without any consideration for future work, and strictly avoid conflict with other assignments or their own corporate interests.

3.2.1 Consultants not to Benefit from Commissions, Discounts, etc.

The payment of the Consultant pursuant to Clause GC 6 shall constitute the Consultant's only payment in connection with this Contract or the Services, and the Consultant shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Consultant shall use their best efforts to ensure that the Personnel, any Sub-Consultants, and agents of either of them similarly shall not receive any such additional payment.

3.2.2 Consultant and Affiliates not to be Otherwise Interested in Project

The Consultant agrees that, during the term of this Contract and after its termination, the Consultant and any entity affiliated with the Consultant, as well as any Sub-Consultants and any entity affiliated with such Sub-Consultants, shall be disqualified from providing goods, works or services (other than consulting services) resulting from or directly related to the Consultant's Services for the preparation or implementation of the project.

3.2.3 Prohibition of Conflicting Activities

The Consultant shall not engage, and shall cause their Personnel as well as their Sub-Consultants and their personnel not to engage, either directly or indirectly, in any business or professional activities which would conflict with the activities assigned to them under this Contract.

3.3 Confidentiality

Except with the prior written consent of the Client, the Consultants, their Sub-Consultants (if any) and the Personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the Services, nor shall the Consultants, their Sub-Consultants (if any) and the personnel make public the recommendations formulated in the course of, or as a result of, the Services. All the





information, data and documents shared with the Consultants shall be sole property of the Client.

3.4 Insurance to be Taken Out by the Consultant

The Consultant (a) shall take out and maintain, and shall cause any Sub-Consultants to take out and maintain, at their (or the Sub-Consultants', as the case may be) own cost but on terms and conditions approved by the Client, insurance against the risks, and for the coverage, as shall be specified in the SC; and (b) at the Client's request, shall provide evidence to the Client showing that such insurance has been taken out and maintained and that the current premiums have been paid.

3.5 Consultant's Actions Requiring Client's Prior Approval

The Consultant shall obtain the Client's prior approval in writing before taking any of the following actions:

- (a) entering into a subcontract for the performance of any part of the Services. The said sub-contract shall be based on the terms and conditions of this Contract,
- (b) appointing such members of the Personnel not listed by name in Appendix C, and
- (c) any other action that may be specified in the SC.

3.6 Reporting Obligations

- (a) The Consultant shall submit to the Client the reports and documents specified in Appendix B hereto, in the form, in the numbers and within the time periods set forth in the said Appendix.
- (b) Final reports shall be delivered in CD ROM in addition to the hard copies specified in said Appendix.
- 3.7 Documents
 Prepared by
 the Consultant
 to be the
 Property of
 the Client
- (a) All plans, drawings, specifications, designs, reports, other documents and software submitted by the Consultant under this Contract shall become and remain the property of the Client, and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents to the Client, together with a detailed inventory thereof.
- (b) The Consultant may retain a copy of such documents and software. Restrictions about the future use of these documents, if any, shall be specified in the SC.

3.8 Accounting, Inspection and Auditing

- 3.8.1 The Consultant shall keep, and shall cause its Sub-consultants to keep, accurate and systematic accounts and records in respect of the Contract, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify relevant time changes and costs.
- 3.8.2 The Consultant shall permit, and shall cause its Sub-consultants to permit, the Client and/or persons appointed by the Client to inspect its accounts and records relating to the performance of the Contract (subject to issuance by the Client of a prior written notice of seven calendar days





to the Consultant) and the submission of the Proposal to provide the Services, and to have such accounts and records audited by auditors appointed by the Client if requested by the Client (at the cost and expense of the Consultant). The Consultant's attention is drawn to Clause 1.9.1 which provides, inter alia, that acts intended to materially impede the exercise of the Client's inspection and audit rights provided for under Clause 3.8 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Client's prevailing sanctions procedures.).

4. CONSULTANT'S PERSONNEL

4.1 Description of Personnel

The Consultant shall employ and provide such qualified and experienced Personnel and Sub-Consultants as are required to carry out the Services. The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Consultant's Key Personnel are described in Appendix C. The Key Personnel and Sub-Consultants listed by title as well as by name in Appendix C are hereby approved by the Client.

4.2 Removal and/or Replacement of Personnel

- (a) Except as the Client may otherwise agree or require, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultant, such as retirement, death, medical incapacity, among others, it becomes necessary to replace any of the Key Personnel or if the replacement is demanded by the Client due to its dissatisfaction with the said Key Personnel, the Consultant shall provide as a replacement a person of equivalent or better qualifications to the satisfaction of the Client within the period of thirty days or such earlier time as required by the Client. Prior to appointing any replacement, the profile of such Personnel shall be shared with the Client.
- (b) If the Client finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultant shall, at the Client's written request specifying the grounds thereof, provide as a replacement a person with qualifications and experience acceptable to the Client within the period notified by the Client.
- (c) The Consultant shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.





5. OBLIGATIONS OF THE CLIENT

5.1 Assistance and Exemptions

The Client shall use its best efforts to ensure that the Government shall provide the Consultant such assistance and exemptions as specified in the SC.

5.2 Change in the Applicable Law Related to Taxes and Duties If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost incurred by the Consultant in performing the Services, then the remuneration and reimbursable expenses otherwise payable to the Consultant under this Contract shall be increased or decreased accordingly by agreement between the Parties, and corresponding adjustments shall be made to the amounts referred to in Clauses GC 6.2 (a) or (b), as the case may be.

5.3 Services and Facilities

The Client may make available free of charge to the Consultant the Services and Facilities listed under Appendix D, if applicable.

6. PAYMENTS TO THE CONSULTANT

6.1 Lump-Sum Payment

The total payment due to the Consultant shall not exceed the Contract Price which is a fixed lump-sum amount covering all costs (and inclusive of all taxes and levies) required to carry out the Services described in Appendix A. Except as provided in Clause 5.2, the Contract Price may only be increased above the amounts stated in Clause 6.2 if the Parties have agreed to additional payments in accordance with Clause 2.4. However, if the taxes are reduced then the Contract Price shall be reduced accordingly, and the benefit of such reduction is passed on to the Client.

- **6.2** Contract Price (a)
- (a) The price payable in foreign currency/currencies is set forth in the SC.
 - (b) The price payable in local currency is set forth in the SC.
- 6.3 Payment for Additional Services

For the purpose of determining the remuneration due for additional services as may be agreed under Clause 2.4, a breakdown of the lump-sum price is provided in Appendices E and F, as applicable.

6.4 Terms and Conditions of Payment Payments will be made to the designated account of the Consultant and according to the payment schedule stated in the SC. Unless otherwise stated in the SC, the first payment shall be made against the provision by the Consultant of an advance payment guarantee for the same amount, and shall be valid for the period stated in the SC. Such guarantee shall be in the form set forth in Appendix G hereto, or in such other form, as the Client shall have approved in writing. Any other payment shall be made after the conditions listed in the SC for such payment have been met, and the





Consultant has submitted an invoice to the Client specifying the amount due.

6.5 Penalties

The Consultant is, at all times, expected to adhere to the quality standards as provided for in Clause 3.1.1. In the event that the Consultant fails to observe and or meet the quality standards as determined by the Client, it shall incur a penalty of 5 % of the total Contract Price.

6.6 Indemnity

The Consultant shall fully indemnify the Client for all its acts and omissions and for non-performance and/or delayed or incomplete deliverables under this Contract. The Client's total liability under this Contract shall not exceed the Contract Price and the Client shall not be responsible for any indirect claims or damages including consequential damages.

7. GOOD FAITH

7.1 Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

8. SETTLEMENT OF DISPUTES

8.1 Amicable Settlement

The Parties agree that the avoidance or early resolution of disputes is crucial for a smooth execution of the Contract and the success of the assignment. The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

8.2 Dispute Resolution

Any dispute between the Parties as to matters arising pursuant to this Contract that cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party for settlement in accordance with the provisions specified in the SC.





III. Special Conditions of Contract

| Number of GC Clause | | Amendments of, and Supplements to, Clauses in the General Conditions of Contract |
|------------------------|--------------|---|
| {1.1(a)} | The words " | in the Government's country" are amended to read in "in Pakistan" |
| 1.3 | The languag | e is English |
| 1.4 | The addresse | es are: |
| | Client: | Punjab Energy Efficiency and Conservation Agency |
| | Attention: | Mr. Abdur Rehman, Program Manager |
| | E-mail: | peeca.pm@energy.punjab.gov.pk |
| | Telephone: | 042-99268362-3 |
| | Consultant: | |
| | Attention: | |
| | Facsimile: | <u> </u> |
| | E-mail: | <u> </u> |





| {1.6} | Not Applicable |
|-----------|---|
| 1.7 | The Authorized Representatives are: |
| | For the Client: Mr. Abdur Rehman |
| | For the Consultant |
| 1.8 | All the payments under the Contract shall be inclusive of all taxes. |
| {2.1} | The Effective Date is the signing date of the Contract |
| 2.2 | The date for the commencement of the Services is the date of signing of the Contract. |
| 2.3 | The time period shall be six (6) months that is one hundred and eighty (180) days from the date of signing of the Contract |
| 3.4 | N/A |
| {3.7 (b)} | The Consultant shall not use these documents and software for purposes unrelated to this Contract without the prior written approval of the Client. |
| {5.1} | Facilitate in coordination of meetings with line departments and site visits. |
| 6.2(a) | N/A |
| 6.2(b) | The amount in local currency is PKR /- |





| 6.4 | The accounts are: |
|-----|---|
| | for foreign currency or currencies: N/A |
| | for local currency: |
| | Payments shall be made according to the following schedule: |
| | a) TEN (10) percent of the lump-sum amount shall be paid upon approval of the |
| | Inception Report by the Client; |
| | b) NINE (9) percent of the lump-sum amount shall be paid upon completion of |
| | survey of electricity consumption and saving potential of four (4) public |
| | institutes followed by furnishing and approval of the Report; |
| | c) NINE (9) percent of the lump-sum amount shall be paid upon completion of |
| | survey of electricity consumption and saving potential of four (4) public |
| | institutes followed by furnishing and approval of the Report; |
| | d) NINE (9) percent of the lump-sum amount shall be paid upon completion of |
| | survey of electricity consumption and saving potential of four (4) public |
| | institutes followed by furnishing and approval of the Report; |
| | e) NINE (9) percent of the lump-sum amount shall be paid upon completion of |
| | survey of electricity consumption and saving potential of four (4) public |
| | institutes followed by furnishing and approval of the Report ; |
| | f) NINE (9) percent of the lump-sum amount shall be paid upon completion of |
| | survey of electricity consumption and saving potential of four (4) public |
| | institutes followed by furnishing and approval of the Report ; |
| | g) NINE (9) percent of the lump-sum amount shall be paid upon completion of |
| | survey of electricity consumption and saving potential of four (4) public |
| | institutes followed by furnishing and approval of the Report ; |
| | h) NINE (9) percent of the lump-sum amount shall be paid upon completion of |
| | survey of electricity consumption and saving potential of four (4) public |
| | institutes followed by furnishing and approval of the Reports ; |
| | i) NINE (9) percent of the lump-sum amount shall be paid upon completion of |
| | survey of electricity consumption and saving potential of four (4) public |
| | institutes followed by furnishing and approval of the Report; |
| | |





| | j) NINE (9) percent of the lump-sum amount shall be paid upon completion of |
|------------|--|
| | survey of electricity consumption and saving potential of four (4) public |
| | institutes followed by furnishing and approval of the Report and |
| | k) NINE (9) percent of the lump-sum amount shall be paid upon completion of |
| | survey of electricity consumption and saving potential of four (4) public |
| | institutes followed by furnishing and approval of the Report. |
| | If the Client is not satisfied with the Services or part of the Services rendered or |
| | finds the relevant Report or Services incomplete, then the Consultant shall be |
| | liable to redo the Report and/or provide the Services, at its own costs and expense, |
| | to the satisfaction of the Client, failing to do so shall entitle the Client to exercise |
| | all the remedies available to it under the law and the Contract. |
| | |
| 6.5 | The interest rate is: N/A |
| 6.5 8.2 | The interest rate is: N/A Disputes shall be settled by arbitration in accordance with the following provisions: |
| | Disputes shall be settled by arbitration in accordance with the following |
| | Disputes shall be settled by arbitration in accordance with the following provisions: If the disputes are not settled by the Parties amicably as stated above then each Party shall have the right to appoint its own arbitrator, who shall jointly nominate an Umpire. The decision of the majority of the arbitrators shall be final and binding on the Parties, and shall not be challenged. The arbitration shall be conducted |
| | Disputes shall be settled by arbitration in accordance with the following provisions: If the disputes are not settled by the Parties amicably as stated above then each Party shall have the right to appoint its own arbitrator, who shall jointly nominate an Umpire. The decision of the majority of the arbitrators shall be final and binding on the Parties, and shall not be challenged. The arbitration shall be conducted under the Arbitration Act, 1940. The language of arbitration proceedings shall be English and the seat of arbitration |





IV. Appendices

Section 5. Terms of Reference (TORs)

HIRING OF CONSULTANCY SERVICES FOR SURVEY FOR ELECTRICITY CONUMPTION & SAVING POTENTIAL OF PUBLIC INSTITUTES

Introduction:

Government of the Punjab has established Punjab Energy Efficiency and Conservation Agency (PEECA) that aims to enforce policies/standards on provincial level to meet the objectives that are in synchrony with the Federal Energy Efficiency & Conservation (EE&C) Objectives. The Agency also intends to manage the behavioral changes & public awareness programs to facilitate the achievement of its objectives, and host training programs for the masses and private sector personnel to create a culture of energy conservation, and carry out the study to indicate the major areas for promotion of EE&C.

PEECA (Punjab Energy Efficiency and Conservation Agency) was established with the aim to bridge the demand and supply gap through efficiency at user end. Since Punjab is the most populated and biggest consumer of Energy in the country, it is important to take measures in order to reduce load on the national grid. With the aim to decrease the gap in supply and demand, PEECA has initiated the energy audit program. The target of this program is to find the energy conservation potentials in these institutes and then implementation of energy conservation strategies to lower the net demand of energy.

Objectives:

The main objective of PEECA's Energy Audit project is to lower Energy Consumption and Promote Energy Conservation approaches in Punjab in order to lower the burden of energy load on national grid; to assess the energy needs and efficiency of institutes/facilities which have 3 levels of details; to propose a comprehensive action plan after completion of energy audit, such as retrofitting potential and solarization to the audited public institutes; and to provide this action plan in the form of a report to guide the government institutes to save energy, reduce operating costs and minimize the impact on the environment.

Scope of Work:

PEECA intends to conduct Energy Audits of 40 Public Sector Institutes by hiring services of Consulting Firms/Companies/Institutions. The following aspects but not limited to, are to be covered while performing the Energy Audits of the public institutes.

- 1. PEECA expects the energy auditor to include all the necessary matters of information in the reports. Analyze and comment on patterns and trends in seasonal energy consumption
- 2. Analyze the historical energy consumption (minimum past two years) and establish an energy baseline and annualized costs
- 3. Analyze and comment on patterns and trends in seasonal energy consumption.





- 4. Review energy meters and list with reference to site energy end use. Review tariff structure and provide breakdown between peak and off peak. Identify appropriate opportunities in peak/load shifting.
- 5. Describe the site's energy using systems and operation & maintenance procedures
- 6. Install loggers on nominated sites. Data loggers are to collect data for parameters such as Power (Real and Reactive), Voltage (V), Current (I), Harmonics (Total Harmonic Distortion, THD %), Energy Consumption (kWh) and Maximum Demand Induction (MDI). The data is to be recoded on daily basis as well as hourly basis, and separate documentation of this information should be generated.
- 7. Prepare but not limited to inception report, detailed audit report and summary report.
- 8. The Consulting Firms/Companies/Institutions shall meet with the client to develop;
 - a) an approved schedule and time to access each institution
 - b) Identify the areas and equipment that will be inspected.
 - c) Describe the method and equipment that will be inspected.
 - d) The number of interviews to be conducted, and
 - e) The duration of each institution inspection.
- 9. Evaluate the institution envelope, characterize the institution usage and type of construction.
- 10. Surveys, measurements, photographs and other data collection methods shall be performed in a way that it minimizes disruption to the institution occupants.
- 11. Instruments utilized should include Lux Meters, Air Meters, Power analyzer and Loggers, Digital Multimeters, Clamp Meters, Thermal Imager and Infrared Thermometers and/or similar equipment with maximum efficiency and accuracy. Detail for equipment and system inspected using these instruments should also be provided. Note temperatures, pressures and other key parameters where applicable
- 12. The electrical measurement should include electricity consumption profile in order to identify improvements needed to reduce consumption. Voltage, current, active power and energy, reactive and distorting power and reactive energy, and power factor calculations is expected to be included in the study. The instruments used for the above-mentioned purpose should also be up to the mark.
- 13. PEECA expects that the audit reports submitted should include: Overall load summary of the government institute; department/building Wise load summary of the institute; and Appliance Wise Load summary of the same institute i.e. list of all types of indoor and outdoor lights, fans, types of air conditioners installed, etc. is to be included.
- 14. The recommended but not limited to lights, fans, HVAC compressors, pumps, motors and other electrical appliances are to be included as well.
- 15. Solar PV Potential, its expected capital investment and expected saving potential per annum of the institution is considered a vital part of the energy audit study. On the basis of this information, Solarization of rooftops of public institutions will be done as an alternate source of energy source. On-Grid Solar PV Design using Helioscope, PVSyst or a similar software is to be used for detailed analysis including shading factor of the obstacles on rooftop. Since it is a clean energy source, the reduction in Green House Gases (GHG) is also made a part of the energy audits study.





- 16. Details regarding Generators installed in the public institute as well as Transformer detail is required since that would help calculate Generator Set (Gen-Set) and fuel consumption calculations. The overall cost saving should also be calculated.
- 17. The information gathered from energy assessment is to be used to introduce energy conservation methods and retrofit appropriate energy saving technologies. Identify and list all opportunities to reduce energy consumption, costs, payback period, energy savings and greenhouse gas emissions.
- 18. Load reduction as well as expected costs of electrical appliances is to be included individually, summarizing current loads, retrofitted loads as well payback period.
- 19. The energy assessment will help the user to determine the purchase of and improvements in the electrical appliances to save energy and money.
- 20. Capital cost estimates based on energy savings in to be included. Capital Expenditure (CAPEX) based on local market equipment of renowned brand for replacement of indoor lights, street lights, fans, air conditioners.... etc. Also, provide IRR and Power factor of these appliances to be retrofitted.
- 21. PVsyst / Helioscope simulation software report for all energy audits conducted (20 institutes) will be provided by the consultant.

4. Budget

The estimated price of this tender is PKR 5 Million including all applicable taxes.

5. Duration

Overall duration of the assignment is expected to be of **06 Months** from the date of the signing of agreement with the Firm/Company/Consultant.

Note: The firm/company/consultant must provide detailed time-frame schedule/Work Plan for completion of assignment in the Methodology-Technical Proposal.

6. Deliverables

The Firms/Companies/Consultants shall be required to fulfill the following reporting requirements:





| Sr. | D.1. 11 | Copies | Payment |
|-----|---|-----------------|-----------------------------|
| No. | Deliverables | (Hard and Soft) | Rs (Including all Taxes) |
| 1. | Inception Report including Energy Audit template, strategy, methodology of analysis, signed time sheet of each person and schedule of work (after signing of the Contract) | 3+1 | 10% |
| 2. | NINE (9) percent of the lump-sum amount shall be paid upon completion of survey of electricity consumption and saving potential of four (4) public institutes followed by furnishing and approval of the Report. | 3+1 | 9% |
| 3. | NINE (9) percent of the lump-sum amount shall be paid upon completion of survey of electricity consumption and saving potential of four (4) public institutes followed by furnishing and approval of the Report. | 3+1 | 9% |
| 4. | NINE (9) percent of the lump-sum amount shall be paid upon completion of survey of electricity consumption and saving potential of four (4) public institutes followed by furnishing and approval of the Report. | 3+1 | 9% |
| 5. | NINE (9) percent of the lump-sum amount shall be paid upon completion of survey of electricity consumption and saving potential of four (4) public institutes followed by furnishing and approval of the Report. | 3+1 | 9% |
| 6. | NINE (9) percent of the lump-sum amount shall be paid upon completion of survey of electricity consumption and saving potential of four (4) public institutes followed by furnishing and approval of the Report. | 3+1 | 9% |
| 7. | NINE (9) percent of the lump-sum amount shall be paid upon completion of survey of electricity consumption and saving potential of four (4) public institutes followed by furnishing and approval of the Report. | 3+1 | 9% |
| 8. | NINE (9) percent of the lump-sum amount shall be paid upon completion of survey of electricity consumption and saving potential of four (4) public institutes followed by furnishing and approval of the Report. | 3+1 | 9% |





| | NINE (9) percent of the lump-sum amount shall be paid upon completion of survey of electricity consumption and saving potential | 3+1 | 9% |
|-----|---|-----|----|
| | of four (4) public institutes followed by | | |
| 9. | furnishing and approval of the Report. | | |
| | NINE (9) percent of the lump-sum amount | | |
| | shall be paid upon completion of survey of | | |
| | electricity consumption and saving potential | 3+1 | 9% |
| | of four (4) public institutes followed by | | |
| 10. | furnishing and approval of the Report. | | |
| | NINE (9) percent of the lump-sum amount | | |
| | shall be paid upon completion of survey of | | |
| | electricity consumption and saving potential | 3+1 | 9% |
| | of four (4) public institutes followed by | | |
| 11. | furnishing and approval of the Report. | | |

Note: Provide 3 copies of the survey of electricity consumption and saving potential at each phase of the project to the Project Manager. Also, provide 2 CDs of the final approved report and all of the contents with any drawings in ".dwg" (native file format for AutoCAD)





Position, Qualification and Experience of Core team:

The consulting team must have the personnel with the following qualification and experiences;

| Sr. No | Key Professional | No. Of Persons | Qualification | Experience |
|-----------|--|-------------------|---|---|
| 1. | Project Manager | 01 | Masters in Electrical Engineering or similar field | Relevant experience of 5 years and more in relevant field |
| 2. | Civil Engineer/Relevant | 01 | Bachelors in Civil Engineering with PEC certification | Relevant experience of 3 years in civil field |
| 3. | Electrical Engineer | 02 | Bachelors in Electrical Engineering with PEC certification | Relevant experience of 3 years |
| 4. | HVAC Expert having relevant experience | 01 | Bachelors in Electrical/Mechanical Engineering with PEC certification | Relevant experience of 3 years |
| 5. | Technicians | 02 | Diploma in Electrical/Mechanical/HVAC | Relevant experience of 2 years |

Appendix B Reporting Arrangements

- 1. The Firm/Company/Consultant shall report to Program Manager, PEECA for Services
- 2. All documentation, reports shall be submitted in the English Language.
- 3. All the data, documents and reports produced by the Firm/Company/Consultant for the said services shall be the property of the PEECA. The Firm/Company/Consultant shall not share and use these data, document and reports for any other purpose / job without the explicit written approval of Managing Director, PEECA.
- 4. In case the Firm/Company/Consultant fails to fulfill the contractual obligations and violate the contract agreement, the contract agreement shall be terminated and Firm/Company/Consultant shall not be liable to make any pending claims.





APPENDIX C - KEY PERSONNEL AND SUB-CONSULTANTS

| Professional Staff | | | | | | |
|--------------------|------|----------------------|----------------------|---------------|--|--|
| Name of Staff | Firm | Area of Expertise | Position Assigned | Task Assigned | | |

APPENDIX D - SERVICES AND FACILITIES PROVIDED BY THE CLIENT

The Client may facilitate in coordination of meetings with line departments and site visits, if deemed appropriate in its sole discretion.