Pre-Qualification Document

Government of the Punjab

Energy Department

Punjab Power Development Co Ltd
Pre-Qualification Document

for

Biomass Fuel Based Power Plant

22 MW Approx. GROSS Capacity (RAW SITE)

At Ayub Agriculture Research Institute
Near Chak Jumra Faisalabad

No. PPDCL/PQD/BM /REV/2016

Chief Executive Officer
Punjab Power Development Co Ltd
Energy Department
Government of the Punjab, Lahore
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INTRODUCTION

1.1 Brief Description of the Project

a. Punjab Power Development Company Limited (PPDCL) – a corporate entity fully owned by the Government of Punjab is delegated to develop Power Generation Projects to mitigate energy crisis in the country. PPDCL has planned to develop 22 MW Gross, biomass based power plant at Ayub Agriculture Research Institute (AARI), near chak jumra Faisalabad as a pilot project to set a reference for future biomass based power plants for public and private sector investors.

b. The outcome of this Project is to produce electric power at inexpensive price to coop load shedding and to contribute for boost up the economic activities in agriculture sectors. Power plant will be operated by EPC contractor after its successful COD.

c. PPDCL has appointed AF Consult U.A.B and Haq-Consult JV as Consultant who will provide detail plant specs, process project stages and will supervise plant construction and testing for its successful COD.

1.2 Abbreviations and Definitions

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AARI</td>
<td>Ayub Agriculture Research Institute</td>
</tr>
<tr>
<td>Applicant</td>
<td>A single company or a Joint Venture (JV) applying for prequalification as an EPC, with O &amp; M at turnkey basis.</td>
</tr>
<tr>
<td>CFBC</td>
<td>Circulating Fluidized Bed Combustion</td>
</tr>
<tr>
<td>Client:</td>
<td>Punjab Power Development Company limited (PPDCL)</td>
</tr>
<tr>
<td>COD</td>
<td>Commercial Operation Date</td>
</tr>
<tr>
<td>Consultant:</td>
<td>AF-Consult UAB and Haq Consult JV</td>
</tr>
<tr>
<td>EPC</td>
<td>Engineering, Procurement &amp; Construction</td>
</tr>
<tr>
<td>FEED</td>
<td>Front End Engineering &amp; Design</td>
</tr>
<tr>
<td>GOP</td>
<td>Government of Pakistan</td>
</tr>
<tr>
<td>HSE</td>
<td>Health Safety and Environment</td>
</tr>
<tr>
<td>ISO</td>
<td>International Standards Organization</td>
</tr>
<tr>
<td>Joint Venture:</td>
<td>Joint Venture (JV) (hereinafter called JV) means a Commercial enterprise undertaken jointly by two or more entities, which have reached/intended to reach a joint agreement to make a Joint Venture to submit a PQD for the Project Works as a single Applicant.</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>Operation and Maintenance</td>
</tr>
<tr>
<td>PEC</td>
<td>Pakistan Engineering Council</td>
</tr>
</tbody>
</table>
Pre-qualification Document

Project: 22 MW Biomass fuel based power plant

Project Works All the permanent and temporary works to be executed and completed by the Contractor under the contract.

Quality Assurance/Quality Control

Right of Way

Scope of Work

A person or persons, firm, partnership, corporation or combination thereof (not being an employee of contractor), to whom any part of the Project Works has been subcontracted by Contractor subject to approval of the Client.

A contract under which a contractor completes the Project based on Client’s FEED and tender SOW, then hands it over in fully operational form to the Client, which needs to do nothing but "turn a key", as it were, to set it in normal operation.

An entity engaged by the Contractor to supply equipment or services.

1.3 Pre-qualification of EPC & Operation and Maintenance contractors for execution of project on Turnkey basis.

a. PPDCL has categorical to carry out pre-qualification of applicants for EPC with O&M of biomass based power plant on Turnkey basis.

b. PEC, the legislative council to standardize engineering profession in Pakistan, has primed "Standard Procedure for Pre-qualification of Constructors", to provide an impartial basis for transparent bidding and award of construction contracts in line with the international practices and relevant PEC Bye-laws, thus minimizing ambiguities and likely contractual disputes.

c. The documents for the Pre-qualification of EPC with O&M, contractors on Turnkey basis for 22 MW biomass based power plant have accordingly been prepared on the basis of above referred PEC Standard Procedure.

d. This Prequalification process is only to shortlist and pre-qualify the applicants on the basis of their experience, expertise, capability and availability of resources to design, procure, build, commission and handover facilities as described.

e. Evaluation of the applicants shall be carried out on the basis of this PQD.
1.4 Brief Overview of the Project Scope of Work (SOW)

The brief overview of this project is provided in this PQD is hereunder, as details will be provided in the tender document to be issued to the Pre-qualified applicants.

1.4.1 Main segment of the Project are:-

a. **Civil Works**
   - **Infrastructure and Foundation**
   - **Civil structures for turbines, boiler, generator and BOP etc.**
   - **Control Room, offices, Residential and non-residential buildings etc**

b. **Biomass fired Boiler**
   Fully Operational with proven technology boiler (like CFBC) with ancillaries to meet Steam requirement of respective steam Turbine of approx..22 MW Gross Capacity.

c. **Steam Turbines, Generator, transformer, switchgear, protection and control panels**
   - Steam Turbines with ancillaries
   - AC Generator with ancillaries’
   - Step up power transformers.
   - Auxiliary transformers.
   - HV/ MV/LV Switch Gears.
   - MV/LV Supply power Systems.
   - Protection and Control Panels.

d. **Balance of Plant**
   - Cooling Water Systems
   - Cooling Water pump House
   - Water treatment Plant
   - Clarifier water Plant
   - Fire Fighting pump House
   - Demi Water Storage Tank
   - Clarified Water Storage Tank
   - Firefighting Water Tank
   - Biomass Handling Facilities and Store yard
   - Ash Handling Facilities
   - Maintenance Workshop
   - Spare Parts Store
   - Fire alarm System

e. **Other Facilities**
   In addition to above arrangements, following major facilities/ installations will also be Installed
   - SCADA system
   - Telecommunication system including fiber optic cable and satellite links.
   - Electrical system
   - Administration Building
   - Security system for all installations
   - Fire and gas detection system
• Central Control Room
• Relay Room
• Battery Room
• Transmission Line Inter connection Arrangements

1.4.2 Scope of Work for EPC and Operation & Maintenance Turnkey contractor

a. The Scope of Work for EPC and Operation & Maintenance contractors on Turnkey basis shall include, but is not limited to providing the following services, as an independent company or by forming a JV or Consortium with other international or local contractors, manufacturers and vendors having proven experience of executing such projects of similar scope:

“Design, procure/ manufacture, Supply, Erection, Construction, Commissioning and testing on EPC basis with O & M of the Project for five years after commercial operation date (COD)

b. The Project and all related facilities shall be designed according to international codes and standards. The design based on international standards shall not be in conflict with the existing laws and regulations of Pakistan.

c. The completion period of the Project from Contract Award to its Commercial Operation shall not exceed 565 days. The EPC & Operation and Maintenance contractor should be capable of managing complex tasks complying fully with the Project schedule, giving inter-alia due consideration to environment protection.

d. The Consultant has carried out Feasibility Studies and EIA Studies of the Project. In this process.

1. Feasibility Study including
   • Biomass logistics
   • EIA Study
   • Topographic/Geo-Tech Study
   • Load Flow and interconnection study

e. The land for Project site is public property under agriculture department, will be handed over to EPC-O&M contractor according to mutually agreed construction schedule.

For further details of Scope of Work please refer to Appendix 2 to this PQD.
2-INVIATION FOR PRE-QUALIFICATION (ADVERTISEMENT)

2.1 Punjab Power Development Company Limited (PPDCL), a corporate entity under Energy Department, Government of the Punjab is mandated to implement, operate and maintain power generation plants in the Punjab to meet energy shortages in the province. PPDCL anticipate for establishment of approximately 22 MW gross capacity, biomass fuel based power plant at Ayub Agriculture Research Institute near chak Jumra, Faisalabad.

2.2 For the construction and operation of this power plant the PPDCL intends to prequalify eligible EPC contractors, on Turnkey basis for the complete scope of works comprising;
   “Engineering Design, Manufacturing, Supply, Erection, Construction, Testing, Commissioning and after COD for Operation & Maintenance of this biomass fuel based power plant (like CFBC Boiler Technology/similar proven technology with efficiency and economy) on Turnkey basis.

2.3 PPDCL therefore invites eligible local and international firms or joint ventures (JV) to submit their applications for prequalification for providing the above services on prescribed format.

2.4 Pre-qualification is open for EPC, Operation and Maintenance Turnkey contractors/ Joint Ventures of contractors who are registered with PEC in appropriate Category for Construction such size of power plant for Engineering Works, described in para 2 above. Applicants who are not registered with PEC shall have to submit an undertaking to get them registered with PEC before the award of contract.

2.5 Qualification criteria and minimum requirements for pre-qualification have been specified in pre-qualification documents as per Punjab Procurement Rules, 2014. A complete set of the prequalification documents (PQD) in English language is available to download on website of Energy Department, Government of the Punjab, Pakistan, free of cost at our website, (www.energy.punjab.gov.pk).

2.6 PQD duly filled with supporting documents must be delivered in sealed envelopes by hand or through registered mail, along with a deposit of non-refundable processing fee of PKR 10000 (Ten thousand) or equivalent in US Dollar in the shape of Pay Order, Bank Draft, Bankers Cheque in favor of, Punjab Power Development Company Limited, 77-Shah Jamal Lahore, Pakistan, up to 03.October,2016 at 11.00 a.m and will be opened at next working day. Envelopes be clearly marked "Application for Pre-qualification of “EPC with O & M on Turnkey basis Contract for approx. 22 MW Gross capacity Biomass power plant at AARI Faisalabad.

2.7 Applications shall be evaluated as per Punjab Procurement Rules, 2014. Applicants will be informed, in due course of time about the result of the evaluation of applications. Only the contractors prequalified under this process will be invited to bid.

2.8 The applications of those firms including their subsidiaries & sub-contractor who are black listed by any Government Department or by any of International Agency like IFC, World Bank, JICA, ADB etc. shall be rejected without detailed evaluation.

2.9 Interested applicants may obtain further information/clarification during office hours, from the under mentioned address or by email (preferred) ppdcl.gmt@energy.punjab.gov.pk;

2.10 Submitted applications/PQD need no revisions

Chief Executive Officer,
Punjab Power Development Company Limited (PPDCL)
77-Shah Jamal, Lahore - Pakistan
Ph: +92-42-99239871, Fax: +92-42-35403642
3 INSTRUCTIONS TO PROSPECTIVE APPLICANT

3.1 Submission of Applications

3.1.1 Applications for pre-qualification is submitted as one original, two photo copies and soft copies through USB). The Employer reserves the right to accept or reject the late applications.

3.1.2 The name and mailing address of the Applicant shall be clearly marked on the lower left hand side of the envelope.

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

3.1.4 (i) Although explained in detail, prospective applicants at least ten (10) days prior to submission of application may request in writing for clarification of Project requirement, the criteria for qualification or any other aspects of the Pre-qualification document. At any time prior to the due date for submission of applications, PPDCL may amend the Pre-qualification Documents on its own initiative or as consequence of any clarification of the applicant’s query and shall be communicated in writing to all prospective applicants who have obtained the Pre-qualification Document from PPDCL.

(ii) To assist in evaluation of applications, the Employer may, at its discretion, ask an applicant for a clarification (including missing documents of its application). The Applicants must respond within 7 Days to all questions and provide complete information as required in para 3.2 below. Any lapses in providing essential information may result in the dis-qualification of the Applicant.

3.1.5 Every page of PQ Application must be initialed by the authorized person bearing company official seal/stamp. Each page shall be sequentially numbered.

3.1.6 PQD amended for approx.. 22MW gross capacity of required biomass power plant, consider this capacity level against previous 5-20 MW if not corrected in this PQD.

3.2 Eligibility Requirements

3.2.1

i. All Firms from any country of the world having diplomatic relations with Islamic Republic of Pakistan except the countries on which trade embargo has been imposed by the Government of Pakistan are eligible to submit the application.

ii. Blacklisted firm by the Client/ PEC/ PPRA and Islamic Republic of Pakistan are not eligible to submit the application.

iii. (a) The applications of those firms including their subsidiaries & sub-contractor who are black listed by any government department or by any International Donor Agency like IFC, World Bank, JICA, and ADB etc. shall be rejected without detailed evaluation.

b) The applicant is required to submit an undertake on judicial paper that he or any of his
associate/manufacturer/supplier/sub-contractor is not in the list of black listed firms of the above mentioned departments or financing institutions; the undertaking should be duly notarized.

a. The following essential information shall be required from the Applicants:

i. Applicants applying for the pre-qualification must be national of a country having bilateral trade relations with the Islamic Republic of Pakistan. However, the Client may also prohibit the participation of the Applicants from some countries in accordance with the policy of the Government of Pakistan.

ii. Applicants must have complete knowledge about the climatic and working conditions and the local Applicable Laws in Pakistan to undertake an EPC & Operation and Maintenance Turnkey Project. A foreign company Applicant is entitled to apply for pre-qualification only in a JV with a Pakistani company, in accordance with the provisions of relevant PEC bye-laws. An undertaking in respect of the compliance of this requirement shall be submitted by the foreign Applicants.

iii. Pre-qualification is open to Applicants who are registered with PEC in appropriate Category for construction of engineering works.

iv. Applicants must carefully examine the qualification requirements detailed in this PQ documents and fully respond to the information required therein. Applicant shall confirm in writing through official letter that complete scope of work detailed herein shall be performed by them for EPC with O & M on Turnkey Contract basis.

v. Applicants shall submit copies of valid certifications ISO9001, ISO14001 and OHSAS 18001 or their equivalent as applicable.

vi. Applicants shall submit duly signed and stamped Non-Disclosure Agreement (Draft agreement is attached as Appendix-IV) in original. Pursuant to the receipt of the Non-Disclosure Agreement by the Client, the Appendix-III shall be sent to the Applicant through email at the time of bidding to pre-qualified bidders only.

vii. The Applicant should provide an undertaking having no conflict of interest on
b. The PQ applications, after receipt, shall first be reviewed with reference to the knock out criteria specified in the table below point C. Only the applications responsive to criteria shall be considered for further evaluation.

c. Provision of Non blacklisted undertaking

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Description</th>
<th>Status (No/Yes)</th>
<th>Status (No/Yes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>Is the Applicant a national of a country maintaining bilateral relations with the Islamic Republic of Pakistan?</td>
<td>No Yes</td>
<td>Not further considered</td>
</tr>
<tr>
<td></td>
<td>PQ proceeds knock out criterion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii)</td>
<td>Is the Applicant fully aware of the Applicable Laws of Pakistan for undertaking an EPC, with &amp; Operation and Maintenance Turnkey Project? An undertaking to team up with at least one Pakistani local company as per PEC's Requirements to be submitted.</td>
<td>No Yes</td>
<td>Not further considered</td>
</tr>
<tr>
<td></td>
<td>PQ proceeds knock out criterion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii)</td>
<td>Proof of valid registration with PEC in appropriate category or required Undertaking from Applicant to get registered before award of EPC contract, as per PEC regulations..</td>
<td>No Yes</td>
<td>Not further considered</td>
</tr>
<tr>
<td></td>
<td>PQ proceeds knock out criterion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv)</td>
<td>Applicant to confirm in writing through official letter that complete Project scope of work shall be performed by him on EPC, &amp; Operation and Maintenance Turnkey basis.</td>
<td>No Yes</td>
<td>Not further considered</td>
</tr>
<tr>
<td></td>
<td>PQ proceeds knock out criterion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>v)</td>
<td>Applicants to submit copies of valid certifications ISO9001, ISO14001 and OHSAS 18001 / their equivalent as applicable. Or Undertaking to provide these certifications before award of EPC.</td>
<td>No Yes</td>
<td>Not further considered</td>
</tr>
<tr>
<td></td>
<td>PQ proceeds knock out criterion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>vi)</td>
<td>Applicants Business License, duly Notarized as per International practices</td>
<td>No Yes</td>
<td>Not further considered</td>
</tr>
<tr>
<td></td>
<td>PQ Proceeds knock out criterion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.3 Qualification / Evaluation Criteria

3.3.1 General

a. Pre-qualification will be based on the qualification requirements / evaluation criteria given in paras 3.2, and in succeeding Paras 3.3.2 to 3.3.8. Applicant’s submission should be responsive to qualification/evaluation criteria mentioned herein above in Application Forms A1 to A11 and Appendix 1 of this PQ document. The Client reserves the right to waive minor deviations, if these don’t materially affect the capability of an Applicant to perform the contract and does not change the scope of work.
b. Sub-contractor's experience and resources shall not be taken into account in determining the Applicant's compliance with the qualifying criteria. However, Joint Venture experience & resources shall be considered. Consortium or Association of firms will be considered for similar treatment as in case of Joint Venture.

c. The following evaluation criteria and assigned weightages for the main categories shall be used for the pre-qualification:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Category</th>
<th>Weightage/Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Eligibility Requirements</td>
<td>Knockout Criteria</td>
</tr>
<tr>
<td>2.</td>
<td>Corporate Information</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>Past Experience</td>
<td>20</td>
</tr>
<tr>
<td>4.</td>
<td>Project Management / Execution Strategy</td>
<td>15</td>
</tr>
<tr>
<td>5.</td>
<td>Engineering Capabilities</td>
<td>15</td>
</tr>
<tr>
<td>6.</td>
<td>Procurement &amp; Supply Capabilities</td>
<td>15</td>
</tr>
<tr>
<td>7.</td>
<td>Construction &amp; Commissioning Capabilities/experience</td>
<td>20</td>
</tr>
<tr>
<td>8.</td>
<td>Contractors Key Personnel</td>
<td>10</td>
</tr>
</tbody>
</table>

Total: 100
Note 1: The Applicant (single/JV) must secure at least 50% score in each of the above categories and minimum of 70% overall marks to qualify for prequalification.

Note 2: Fake information will result disqualification of the applicants with black listing.

The detailed qualification requirements / evaluation criteria for each of the above mentioned categories shall be as follows:

3.3.2 Corporate Information

a. Following information shall be required for assessment of the Applicant:

i. Applicant’s company name, legal form of the company, year of incorporation (provide copy of incorporation), location of office, contact information, list of board of directors. The applicant is also required to submit duly notarized corporation certification indicting business.

ii. Whether Applicant is a member of corporate group / organization (provide information of core business areas / main business / 100% subsidiary / partly owned subsidiary);

iii. Structure of the company and corporate organization chart;

iv. In case of foreign Applicants already having an operating office in Pakistan, provide proof of registration of such operating office as per legislation.

v. Applicant’s tax information as applicable;

vi. Applicant’s turn over for the last three year;

vii. Details of total equity capital of the Applicant;

viii. Applicant’s last three years Audited Balance Sheets;

ix. List of current projects / workload & nature of the Project.

x. Confirmation that Project language / communication shall be English.

xi. Litigation history of the Applicant (including JV and its partners) as per Annexure A11.

xii. Non Blacklisting Undertaking.
b. Credit Marks shall be awarded under this category using the following criteria:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Description</th>
<th>Max Points</th>
<th>Weightage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>Total equity capital of the Applicant in Million US Dollar.</td>
<td></td>
<td>Less than 65 M USD: 0 pts 65 M USD and above: 2 pts</td>
</tr>
<tr>
<td>ii)</td>
<td>Applicant’s financial turnover for the past 3 years in Million US Dollar (please provide financial statements for these years).</td>
<td>2</td>
<td>Less than 100 M USD: 0 pts 100 M USD: 1 pts 200 M USD: 2 pts</td>
</tr>
<tr>
<td>iii)</td>
<td>Finance resources reserve for this project. (Provide list of current and forthcoming Projects with financial load.)</td>
<td>1</td>
<td>Less than 50% of equity capital: 0 pts 50% of equity capital and more: 1 pts</td>
</tr>
</tbody>
</table>

Sub-total: 5

Note: The Applicant's if Joint Venture then total equity capital and turnover of the Joint Venture partners shall be considered.

3.3.3 Past Experience

a. Please provide following information:

i. Applicant’s experience and reference of successfully completing Biomass Power Projects of similar scope emphasis on management of the prep-work and subsequent execution during the last 15 years. Experience should be established on the basis of contact information and completion certificate from the Employer for whom the Projects were completed.

b. Applicant’s relevant/ general experience in Thermal Power Projects during the last 15 years. Credit Marks shall be awarded under this category using the following criteria:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Description</th>
<th>Maximum Points</th>
<th>Weightage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>Applicant’s experience and reference of successfully completing EPC for biomass fuel based power projects in last 15 years. (Client information where PPDCL may contact and completion certificate is required.</td>
<td></td>
<td>One (01) project: 5 pts Two (02) or more projects: 10 pts</td>
</tr>
<tr>
<td>ii)</td>
<td>Applicant’s general experience in Thermal Power Projects during the last 15 years. Info/ Proof as point- (i) above is required.</td>
<td></td>
<td>Two points for each Project subject to max of 5 projects</td>
</tr>
</tbody>
</table>

Sub-total: 20
3.3.4 Project Management / Execution Strategy, Plan and Procedures

a. Please provide following information under this section:

   i. Applicant's Project management & control strategy for handling of biomass Power EPC projects of similar scope;

   ii. Applicant's proposed / sample Project execution schedule;

   iii. Applicant’s Project QA/QC and HSE policies, procedures and strategy (submit copies of certifications ISO9001, ISO14001 and OHSAS 18001 or their equivalent as applicable);

   iv. Applicant's proposed Project organization charts including interfaces for sub-contracted partial scope;

   v. Applicant's proposed staff loading chart; and

   vi. Applicant’s Project risk management strategy

b. Credit Marks shall be awarded under this category using the following criteria

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Description</th>
<th>Maximum Points</th>
<th>Weightage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>Applicant’s Project management &amp; control strategy for biomass EPC projects of similar scope.</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ii)</td>
<td>Applicant’s proposed / sample Project execution schedule</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>iii)</td>
<td>Applicant’s Project QA/QC and HSE policies, procedures and strategy (submit copies of certifications /submit undertaking with this PQD for submission before award of EPC for ISO9001, ISO14001 and OHSAS 18001 or their equivalent as applicable)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>iv)</td>
<td>Management procedures and organization, Project execution plan for similar projects. Procedures and organization set up, Project execution plan, resource planning, schedule control for similar projects to be Submitted.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>v)</td>
<td>Applicant’s proposed staff loading chart.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>vi)</td>
<td>Applicant’s Project risk management strategy.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sub-total:</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>
3.3.5 - Engineering Capabilities

a. Applicant must submit following information regarding the engineering work for Biomass Power Projects of similar scope:
   
   i. Methodology and procedures for performing engineering work;
   
   ii. Engineering experience and competency of subcontractors;
   
   b. Engineering organization and availability of adequate resources for this Project;
   
   c. List of engineering and planning software in use in Applicant’s company;
   
   d. Sample list of documents applicable to similar scope projects.

   c. Credit Marks shall be awarded under this category using the following criteria:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Description</th>
<th>Maximum Points</th>
<th>Weightage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>Applicant’s methodology and procedures for performing engineering work and list of engineering software being used in your Company.</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>ii)</td>
<td>Engineering experience and competency of subcontractors</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>iii)</td>
<td>Engineering organization and availability of adequate resources.</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>iv)</td>
<td>Applicants Management Of Change System to record and control engineering changes</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>v)</td>
<td>Sample list of deliverables applicable to Similar projects</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**Sub-total:** 15
3.3.6-Procurement and Supply Capabilities

a. Applicant must submit its procurement and expediting strategy, procedures for managing and supplying equipment and materials from the potential Vendors to meet the Project time schedule. Please provide following information:

   i. Applicant’s methodology and procedures ensuring prompt and timely completion;
   ii. Applicant’s subcontracting strategy and Vendor prequalification procedures;
   iii. Applicant’s procurement organization, resources;
   iv. Applicant’s Project specific information and procedures;

b. Credit Marks shall be awarded under this category using the following criteria:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Description</th>
<th>Maximum Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>Applicant’s methodology and procedures insuring prompt and timely completion</td>
<td>7</td>
</tr>
<tr>
<td>ii)</td>
<td>Applicant’s subcontracting strategy and Vendor prequalification, procedures.</td>
<td>2</td>
</tr>
<tr>
<td>iii)</td>
<td>Applicant’s procurement organization &amp; Resources</td>
<td>4</td>
</tr>
<tr>
<td>iv)</td>
<td>Applicant’s Project specific information and procedures</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-total:</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
3.3.7 Construction and Commissioning Capabilities

a. Construction, Testing, Commissioning and Test Operation of Biomass Power Projects and other related Equipment / Installation etc.

i. Applicant must submit its strategy, procedures, method statements, list of tools and plants, machinery, manpower resources, mobilization plan, camps erection, stock piling management of the Biomass based Power Projects and other related equipment / Installation, training program for Client’s personnel etc. for their construction as per Project schedule.

b. Credit Marks shall be awarded under this category using the following criteria:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Description</th>
<th>Maximum Points</th>
<th>Weightage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>Applicant’s construction methodology, procedures &amp; plans</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>ii)</td>
<td>Work planning and work preparation for biomass Power Projects-methodology in general and templates of planning process and procedures for similar projects executed by Applicant.</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>iii)</td>
<td>Applicant’s construction organization &amp; Resources</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>iv)</td>
<td>Applicant’s list of the equipment, machinery, tools and plants available for the Plant construction-commissioning</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>v)</td>
<td>Construction subcontractors, subcontracting procedures</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Sub-total: 20

3.3.8 Contractor’s Key Personnel

a. The Applicants to submit CVs of the personnel nominated for the following positions in connection with the PQ requirements:

- Project Director;
- Contract Manager;
- Engineering Manager;
- Procurement & Contract Manager;
- Construction/site Manager;
- Boiler Expert
- Turbine Expert
- QA/QC Manager;
- HSE Manager;
- Commissioning Manager.
b. Credit Marks shall be awarded under this category using the following criteria:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Description</th>
<th>Maximum Points</th>
<th>Weightage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>Project Director: Graduate Mechanical/Electrical Engineer with experience of 20 years on similar projects.</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>ii)</td>
<td>Environment Manager: Environment Engineer/M.Sc Environmental Science with experience of 10 years on similar projects</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>iii)</td>
<td>Design Engineering Manager: Graduate Mechanical/Electrical Engineer with experience of 15 years on similar projects.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>iv)</td>
<td>Procurement &amp; Contract Manager: Graduate Mechanical/Electrical Engineer with experience of 15 years on similar projects.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>v)</td>
<td>Construction Manager: Graduate Civil Engineer with experience of 15 years on similar projects.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>vi)</td>
<td>Boiler Engineer: Graduate Mechanical Engineer with experience of 15 years on similar projects</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>vii)</td>
<td>Turbine Expert: Graduate Mechanical Engineer with experience of 15 years on similar projects</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>viii)</td>
<td>QA/QC Manager: Graduate Civil/Mechanical Engineer with experience of 10 years on similar projects.</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>ix)</td>
<td>HSSE Manager, Graduate Engineer with experience of 10 years on similar projects.</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>x)</td>
<td>Commissioning Manager, Graduate Mechanical/Electrical Engineer with experience of 15 years on similar projects.</td>
<td></td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Sub-total:** 10
3.4 Joint Venture (JV)

3.4.1 Joint Venture must comply with the following requirements:

a. Following are minimum qualification requirements:

   (i) The members of the joint of Venture shall not be more than three (3)

   (ii) The JV is considered as one applicant. The lead partner of the JV shall secure at least fifty (50) percent of the maximum points against qualification / evaluation criteria given in para 3.3 above.

   (iii) If scope of work is divided among JV partners then each of the partners shall secure at least Twenty five (25) percent of the maximum points, against qualification / evaluation criteria given in para 3.3 above, else point (ii) is applicable.

   (iv) The JV must collectively satisfy the qualifying / evaluation criteria for which purpose the relevant figures for each of the partners shall be added together to arrive at the JV’s total capacity for point-ii above.

b. Change in Joint Venture shall be discouraged. If any such situation arises the applicants qualification shall be reassessed and any change in a prequalified JV after prequalification, shall be subject to the written approval of PPDCL prior to the deadline for submission of bids. Such approval may be denied if:

   (i) Partner(s) withdraw from a JV and remaining partners do not meet the qualifying requirements;

   (ii) The new partners to a JV are not qualified individually or as another JV; or

   (iii) In the opinion of PPDCL, a substantial reduction in competition would result.

c. Bid shall be signed by all members in the JV so as to legally bind all partners, jointly and severally, and any bid shall be submitted with a copy of the JV agreement providing the joint and several liabilities with respect to the completion of contract.

3.4.2 The prequalification of a JV does not necessarily prequalify any of its partners individually or as a partner in any other JV or association. In case of dissolution of a JV, each one of the constituent firms may prequalify if they meet all the prequalification requirements and any partner of J.V has requested/shall request for the same and then his prequalification shall be subject to the written approval after evaluation from PPDCL.

3.5 Conflict of Interest

3.5.1 The Applicant (including all members of a JV) must not be associated, nor have been associated in the past, with the Consultant or any other entity that has prepared the design, specifications, and other prequalification and bidding documents for the Project, or
was proposed as Engineer for the contract, over the last five years. Any such association may result in disqualification of the Applicant.

3.6 **Updating Prequalification Information**

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

3.7 **Other Factors**

3.7.1 Only firms and JV that have been prequalified under this procedure shall be invited to bid. A qualified firm or a member of a qualified JV may participate only in one bid for the contract. If a firm submits more than one bid, singly or as a JV, all bids including that bidder will be rejected. This rule will not apply in respect of bids which include specialist subcontractors who are used by more than one bidder provided that there is no conflict of interest.

3.7.2 The Client reserves the right to:-

   a. Amend the scope and value of any contract(s) to be bid, in which event Bid shall be floated to all the pre-qualified bidders in the manner it was originally floated.

   b. Cancel the prequalification process and reject all applications. The Client shall neither be liable for any such actions nor be under any obligation to inform the Applicant of the grounds for rejection, however, may be apprised if deemed appropriate.

3.7.3 Applicants will be informed in writing about the result of the prequalification process at energy department website or via e-mail to all applicants at their provided e-mail address.

3.8 **Announcement of Pre-Qualified Bidders**

Client will announce the result of Pre-qualification/evaluation on the following website:

(energy.punjab.gov.pk/ppdcl.html)
(www.ppra.punjab.gov.pk)

3.9 **Redressal of Grievances**

Client in accordance with provisions of Rule 67 of Punjab Public Regulating Authority (PPRA) Rule, 2014 shall constitute a Grievance Redressal Committee comprising of odd no of persons with proper powers and authorization to address the complaint if any with the following mandate;

i. Any Applicant feeling aggrieved by any act of the procuring agency after the submission of his
bid may lodge a written complaint concerning his grievances not later than ten days after the announcement of the applicant evaluation report.

ii. The Committee shall investigate and decide upon the complaint within fifteen days of the receipt of the complaint

iii. Mere fact of lodging of a complaint shall not warrant suspension of the procurement process.
Letter of Application

Date:.................................

To: The Chief Executive Officer
    Punjab Power Development Company Limited
    77-Shah Jamal Lahore, Pakistan.

Sir,

1. Being duly authorized to represent and act on behalf of ................................... (hereinafter “the Applicant”), and having reviewed and fully understood all the prequalification information provided, the undersigned hereby apply to be prequalified as a bidder for the EPC and operation & Maintenance Contract on Turnkey basis for approx.. 22 MW Biomass based power plant at AARI Faisalabad.
   (Contract No.----------------):

2. Attached to this letter are copies of original documents defining 1:
   (a) the Applicant's legal status;
   (b) the principal place of business; and
   (c) the place of incorporation (for Applicants who are corporations); or
   the place of registration and the nationality of the owners (for Applicants who are partnerships or individually-owned firms).

3. PPDCL and its authorized representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents, and information submitted in connection with this application, and to seek clarification from our bankers and Clients regarding any financial and technical aspects. This Letter of Application will also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information, to provide such information deemed necessary and requested by yourselves or the authorized representative to verify statements and information provided in this application, or with regard to the resources, experience, and competence of the Applicant.

4. PPDCL and its authorized representatives may contact the following persons for further information, if needed.
5. This application is made with the full understanding that:

(a) bids by prequalified Applicants will be subject to verification of all information submitted for prequalification at the time of bidding;

(b) the Client reserves the right to:

   (i) amend the scope and value of any contract under this Project; in such event bids will only be called from prequalified bidders who meet the revised requirements; and

   (ii) reject or accept any application, cancel the prequalification process, and reject applications; and

(c) the Client shall not be liable for any such actions and shall be under no obligation to inform the Applicant of the grounds for actions at 5(b) hereinabove;

(d) the Client shall not be liable for consequence of, and shall be under no obligation to inform the Applicant of the grounds for, actions taken under para 5(b) hereinabove.

Applicants who are not JV should delete para 6&7 and initial the deletions.

6. Appended to this application, we give details of the participation of each party, including capital contribution and profit/loss agreements, to the JV or association. We also specify
the financial commitment in terms of the percentage of the value of the (each) contract, and the responsibilities for execution of the (each) contract.

7. We confirm that in the event that we bid, that bid as well as any resulting contract will be.

(a) signed so as to legally bind all partners, jointly and severally; and

(b) submitted with a Joint Venture agreement providing the joint and several liability of all partners in the event the contract is awarded to us.

8. The undersigned declare that the statements made and the information provided in the duly completed application are complete, true, and correct in every detail.

<table>
<thead>
<tr>
<th>Signed</th>
<th>Signed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name</td>
</tr>
<tr>
<td>For and on behalf of</td>
<td>For and on behalf of</td>
</tr>
<tr>
<td>(name of Applicant</td>
<td>(name and signature</td>
</tr>
<tr>
<td>or lead partner of a</td>
<td>of other partners</td>
</tr>
<tr>
<td>JV)</td>
<td>of the JV)</td>
</tr>
</tbody>
</table>
General Information

All individual firms and each partner of a JV applying for prequalification are requested to complete the information in this form. Nationality information is also to be provided for foreign owners or Applicants who are forming part of the Joint Ventures as required under the PEC Bye-Laws as a Partnership/Joint Venture.

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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Name of Firm</td>
</tr>
<tr>
<td>2.</td>
<td>Head Office Address</td>
</tr>
</tbody>
</table>
| 3. | Telephone | Contact Person:  
                              Name:  
                              Title: |
| 4. | Fax | Telex |
| 5. | Place of Incorporation/Registration | Year of incorporation/registration |

### NATIONALITY OF OWNERS

<table>
<thead>
<tr>
<th>NAME</th>
<th>NATIONALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
</tbody>
</table>
General Experience Record

All individual firms and all partners of a JV are requested to complete the information in this form. The information supplied should be the annual turnover of the Applicant (or each member of a JV), in terms of the amounts billed to Clients for each year for work in progress or completed over the past five years.

*Use a separate sheet for each partner of a JV.*

<table>
<thead>
<tr>
<th>Year</th>
<th>Turnover (in actual currency)</th>
<th>Equivalent Rupees in Millions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Joint Venture Summary

<table>
<thead>
<tr>
<th>Names of all Partners of a Joint Venture</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lead Partner</td>
</tr>
<tr>
<td>2. Partner</td>
</tr>
<tr>
<td>3. Partner</td>
</tr>
</tbody>
</table>

*Total value of annual construction turnover, in terms of work billed to Clients,*

<table>
<thead>
<tr>
<th>Annual Turnover Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>(Construction only; Equivalent in Pak Rupees, Millions)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partner</th>
<th>Form A-2 Page No.</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lead Partner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Partner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Partner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total:             |
|                   |
|                   |

Punjab Power Development Co Ltd
Page 29
To prequalify, the Applicant shall be required to pass the specified requirements applicable to this form, as set out in the "Instructions to Applicants".

On a separate page, using the format of Application Form A-5, each Applicant / Joint Venture is required to list all contracts of a similar nature and complexity to the contract for which the Applicant wishes to qualify, undertaken during the last fifteen years in terms of para 3.3.4 of Instruction to the Applicants. The information is to be summarized, using Application Form A-5, for each contract completed or under execution by the Applicant or by each partner of a Joint Venture with client contact where PPDCL can contact and agreement/completion proof.

Where the Applicant proposes to use named subcontractor(s) for critical components of the works, or for work contents in excess of 10 percent of the value of the whole works, the information in the aforementioned forms should also be supplied for each specialist subcontractor.
## Application Form A-5

Details of Contracts of Similar Nature and Complexity

Name of Applicant or partner of a JV

Use a separate sheet for each contract.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 1. | Name of Contract  
|   | Country |
| 2. | Name of Employer |
| 3. | Employer Address  
|   | .......................................................................................................................... |
| 4. | Nature of works and special features relevant to the contract for which the Applicant wishes to prequalify  
|   | .......................................................................................................................... |
| 5. | Contract Role (Tick One)  
|   | (a) Sole Contractor  
|   | (b) Sub-Contractor  
|   | (c) Partner in a Joint Venture |
| 6. | Value of the total contract (in specified currencies) at completion, or at date of award for current contract  
|   | Currency..........  
|   | Currency...........  
|   | Currency............... |
| 7. | Equivalent in Pak/Rs. |
| 8. | Date of Award |
| 9. | Date of Completion  
|   | Delay time |
| 10. | Contract Duration (Years and Months)  
|    | _____ Years  
|    | _____ Months |
| 11. | Specified Information. |
Applicants and each partner to an application should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which substantial Completion Certificate has yet to be issued.

<table>
<thead>
<tr>
<th>Name of Contract</th>
<th>Value of Outstanding work (Equivalent Pak Rs. Millions)</th>
<th>Estimated Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
For specific positions essential to contract implementation, listed in para 3.3.9 of Instructions to the Applicants, the Applicants should provide the names of candidates qualified to meet the specified requirements stated for each position. The data on their experience should be supplied on separate sheets using one Form for each candidate (Application Form A-8).

<table>
<thead>
<tr>
<th>1.</th>
<th>Title of Position</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Name of Prime Candidate</td>
</tr>
<tr>
<td></td>
<td>Name of Alternate Candidate</td>
</tr>
<tr>
<td>2.</td>
<td>Title of Position</td>
</tr>
<tr>
<td></td>
<td>Name of Prime Candidate</td>
</tr>
<tr>
<td></td>
<td>Name of Alternate Candidate</td>
</tr>
<tr>
<td>3.</td>
<td>Title of Position</td>
</tr>
<tr>
<td></td>
<td>Name of Prime Candidate</td>
</tr>
<tr>
<td></td>
<td>Name of Alternate Candidate</td>
</tr>
<tr>
<td>4.</td>
<td>Title of Position</td>
</tr>
<tr>
<td></td>
<td>Name of Prime Candidate</td>
</tr>
<tr>
<td></td>
<td>Name of Alternate Candidate</td>
</tr>
</tbody>
</table>
Application Form A-8

<table>
<thead>
<tr>
<th>Position</th>
<th>Candidate [Tick appropriate one]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ] Prime [ ] Alternate</td>
</tr>
</tbody>
</table>

**Candidate information**

1. Name of Candidate
2. Date of Birth
3. Professional Qualification

**Present employment**

4. Name of employer
5. Address of employer

<table>
<thead>
<tr>
<th>Telephone</th>
<th>Contact (manager/personnel officer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fax</td>
<td>Telex</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Job title of candidate</th>
<th>Years with present employer</th>
</tr>
</thead>
</table>

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

<table>
<thead>
<tr>
<th>Month/ Dates/Years</th>
<th>Company / Project / Position / Relevant technical and management experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
</tr>
</tbody>
</table>

Professionals can be interviewed/ examined by the Punjab power development Co Ltd, at pre-qualification or later stage, can be changed at unsatisfactory result.
Application Form A-9

The Applicant shall provide adequate information to demonstrate clearly that he has the capability to meet the requirements of tools and plant and machinery for the execution of the Project in terms of para 3.2.9 of Instructions to Applicants. A separate Form shall be prepared for each item of equipment and plant proposed to be used by the Applicant.

<table>
<thead>
<tr>
<th>Item of Equipment</th>
<th>1. Name of manufacturer</th>
<th>2. Model and power rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3. Capacity</td>
<td>4. Year of manufacture</td>
</tr>
<tr>
<td></td>
<td>5. Current location</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Details of current commitments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Indicate source of the equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>☐ Owned ☐ Rented ☐ Leased</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Owner</th>
<th>8. Name of owner</th>
<th>9. Address of owner</th>
<th>Telephone</th>
<th>Contact name and title</th>
</tr>
</thead>
<tbody>
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<td>Fax</td>
<td>Telex</td>
</tr>
<tr>
<td>Agreement</td>
<td>Details of rental/lease specific to the Project.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Applications, including each partner of a JV, should provide financial information to demonstrate that they meet the requirements stated in the Instructions to Applicants. Each Applicant or partner of a JV must fill-in this form. If necessary, use separate sheets to provide complete banker information. A copy of the audited balance sheets should be attached, as per requirements of para 3.3.2 of Instruction to the Applicants.

<table>
<thead>
<tr>
<th>Banker</th>
<th>Name of banker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Address of banker</td>
</tr>
<tr>
<td></td>
<td>Telephone</td>
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<tr>
<td></td>
<td>Contact name and title</td>
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<tr>
<td></td>
<td>Fax</td>
</tr>
<tr>
<td></td>
<td>Telex</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Financial information in Pak Rs. or equivalent</th>
<th>Actual: previous five year</th>
<th>Projected: next two years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total assets</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Current assets</td>
<td></td>
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<tr>
<td>3. Total liabilities</td>
<td></td>
<td></td>
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<tr>
<td>4. Current liabilities</td>
<td></td>
<td></td>
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<tr>
<td>5. Profits before taxes</td>
<td></td>
<td></td>
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<tr>
<td>6. Profits after taxes</td>
<td></td>
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</tr>
</tbody>
</table>
Specific proposed sources of financing to meet the cash flow of the Project, net of current commitments.

<table>
<thead>
<tr>
<th>Source of financing</th>
<th>Amount (Pak Rs. or equivalent)</th>
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<tbody>
<tr>
<td>1.</td>
<td></td>
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<tr>
<td>2.</td>
<td></td>
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<tr>
<td>3.</td>
<td></td>
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<tr>
<td>4.</td>
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</tr>
</tbody>
</table>

Attach audited financial statements for the last three years (for individual Applicant or each partner of JV) as per requirements of para 3.2.3 of Instruction to the Applicants.

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

Applicants, including each of the partners of a JV, should provide information on any history of litigation or arbitration resulting from contracts executed in the last five years or currently under execution. A separate sheet should be used for each partner of JV.

<table>
<thead>
<tr>
<th>Year</th>
<th>Award FOR or AGAINST Applicant</th>
<th>Name of Client, cause of litigation, and matter in dispute</th>
<th>Disputed amount (current value Pak Rs. or equivalent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>SERIAL NO.</td>
<td>INFORMATION FOR APPLICANT’S ASSESSMENT</td>
<td>REFERENCE TO PQ DOCUMENT</td>
<td>APPLICANT CONTRACTOR’S RESPONSE</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------</td>
<td>--------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>ELIGIBILITY REQUIREMENTS</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1</td>
<td>Is the Applicant a national of a country maintaining bilateral relations with the Islamic Republic of Pakistan?</td>
<td>No: not further considered Yes: PQ proceeds</td>
</tr>
<tr>
<td></td>
<td>1.2</td>
<td>Is the Applicant fully aware of the climatic and working conditions of Pakistan and the local Applicable Laws to do an EPC Project? An undertaking to team up with at least one Pakistan local company as per PEC’s requirements to be submitted.</td>
<td>No: not further considered Yes: PQ proceeds knock out criterion</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>Proof of registration with Pakistan Engineering Council (PEC) and national tax no. NTN OR submit an undertaking to comply with all PEC’s requirements.</td>
<td>No: not further considered Yes: PQ proceeds knock out</td>
</tr>
<tr>
<td></td>
<td>1.4</td>
<td>Applicant to confirm in writing through official letter that complete Project scope of work shall be performed on EPC / Turnkey basis.</td>
<td>No: not further considered Yes: PQ proceeds knock out</td>
</tr>
<tr>
<td>2</td>
<td>CORPORATE INFORMATION</td>
<td>3.3.1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2.1</td>
<td>Applicant’s Name</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.2</td>
<td>Is the Applicant government sponsored</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.3</td>
<td>Legal status of the Applicant</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.4</td>
<td>Year of incorporation (provide copy of certificate of incorporation)</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>Is Applicant a member of corporate group / organization? (Please provide information of core business areas / main business / 100% subsidiary / partly owned subsidiary.)</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.6</td>
<td>In case of Joint Venture (JV), provide JV Agreement, JV Structure and split of work between JV Partners.</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.7</td>
<td>Organization structure (submit corporate / company organization chart)</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.8</td>
<td>Applicant’s Contact Address</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.8.1</td>
<td>Address</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.8.2</td>
<td>Department</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.8.3</td>
<td>Responsible contact person</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.8.4</td>
<td>Telephone No.:</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.8.5</td>
<td>Telefax No.:</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.8.6</td>
<td>E-Mail Address:</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.8.7</td>
<td>for identification as proof of registration with income tax authorities</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.9</td>
<td>Applicant’s employees during last 3 years.</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.9.1</td>
<td>2008:</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.9.2</td>
<td>2009:</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.9.3</td>
<td>2010:</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.10</td>
<td>Applicant’s combined Equity Capital in USD.</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.11</td>
<td>Applicant’s combined financial turnover for the past 3 years in Million USD (please provide financial statements)</td>
<td>for information</td>
</tr>
<tr>
<td></td>
<td>2.11.1</td>
<td>2013</td>
<td>Less than 60 M USD: 0 pts 60 M USD and above: 2 pts</td>
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<tr>
<td></td>
<td>2.11.2</td>
<td>2014</td>
<td>Less than 100 Million USD: 0 pts 100 M USD +1 point More than 100 M USD: 2 pts</td>
</tr>
<tr>
<td></td>
<td>2.11.3</td>
<td>2015</td>
<td>Less than 50%: 0 pts More than 50%: 1 pts</td>
</tr>
<tr>
<td></td>
<td>2.12</td>
<td>Equity Capital reserved for this project provide list of current projects / workload / spare capacity for this project.)</td>
<td>for information</td>
</tr>
<tr>
<td>SERIAL NO.</td>
<td>INFORMATION FOR APPLICANT’S ASSESSMENT</td>
<td>REFERENCE TO PQ DOCUMENT</td>
<td>APPLICANT CONTRACTOR’S RESPONSE</td>
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<tr>
<td>-----------</td>
<td>----------------------------------------</td>
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</tr>
<tr>
<td>3</td>
<td>Project Financing</td>
<td></td>
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<tr>
<td></td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4  PAST EXPERIENCE  3.3.3  20

- 4.1 Applicant’s experience and reference of successfully completing EPC of biomass fired power plant. During last 15 years. (Client completion certificate and contact information is required with supporting documents of proof)
  - 10 One (01) project: 5 pts
  - Two (02) projects or more: 10 pts

- 4.2 Applicant’s general experience in thermal power projects during the last 15 years.
  - 10 3.3 points for each Project subject to maximum of three projects

5  PROJECT MANAGEMENT / EXECUTION STRATEGY, PLAN AND PROCEDURES  3.3.4  15

- 5.1 Applicant’s Project management & control strategy for Biomass Power EPC projects of similar scope.
  - 4

- 5.2 Applicant’s proposed / sample Project execution schedule
  - 3

- 5.3 Applicant’s Project QA/QC and HSE policies, procedures and strategy with copies of certifications ISO9001, ISO14001 and OHSAS 18001 or their equivalent as applicable.
  - 1

- 5.4 Management procedures and organization, Project execution plan for similar projects. Procedures and organization set up, Project execution plan, resource planning, schedule control for similar projects to be submitted.
  - 3

- 5.5 Applicant’s proposed staff loading chart.
  - 2

- 5.6 Applicant’s Project risk management strategy.
  - 2

6  ENGINEERING CAPABILITIES  3.3.5  15

- 6.1 Applicant’s methodology and procedures for performing engineering work and list of engineering software being used in your Company.
  - 5

- 6.2 Engineering experience and competency of subcontractors
  - 2

- 6.3 Engineering organization and availability of adequate resources.
  - 4

- 6.4 Sample list of deliverables applicable to similar biomass projects i.e. Power Projects.
  - 2

7  PROCUREMENT AND SUPPLY CAPABILITIES  3.3.6  15

- 7.1 Applicant’s methodology and procedures insuring prompt and timely completion
  - 7

- 7.2 Applicant’s project specific information and procedures
  - 2

- 7.3 Applicant’s project specific information and procedures
  - 2
<table>
<thead>
<tr>
<th>SERIAL NO.</th>
<th>INFORMATION FOR APPLICANT'S ASSESSMENT</th>
<th>REFERENCE TO PQ DOCUMENT</th>
<th>APPLICANT CONTRACTOR’S RESPONSE</th>
<th>MAXIMUM POINTS</th>
<th>WEIGHTAGE POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>CONSTRUCTION AND COMMISSIONING CAPABILITIES</td>
<td>3.3.7</td>
<td></td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>8.1</td>
<td>Applicant's construction methodology, procedures &amp; plans</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>8.2</td>
<td>Work Planning and work preparation for pipeline construction - methodology in general and templates of planning process and procedures for similar projects executed by applicant</td>
<td></td>
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<td>5</td>
<td></td>
</tr>
<tr>
<td>8.3</td>
<td>Applicant’s construction/commissioning organization &amp; resources</td>
<td></td>
<td></td>
<td>4</td>
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</tr>
<tr>
<td>8.4</td>
<td>Applicant's list of the equipment, machinery, tools and plants available.</td>
<td></td>
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<td>4</td>
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</tr>
<tr>
<td>8.5</td>
<td>Construction subcontractors subcontracting procedures</td>
<td></td>
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<td>2</td>
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<tr>
<td>2</td>
<td>Contract’s Key Personnel</td>
<td>3.3.8</td>
<td></td>
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<tr>
<td>9.1</td>
<td>Submit CVs</td>
<td></td>
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<td>10</td>
<td></td>
</tr>
<tr>
<td>9.1.1</td>
<td>Project Director, Graduate Engineer with experience of 20 years and above on similar projects</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9.1.2</td>
<td>Environment Manager, Graduate Engineer with experience of 15 years and above on similar projects.</td>
<td></td>
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<td>0.5</td>
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</tr>
<tr>
<td>9.1.3</td>
<td>Engineering Manager, Graduate Engineer with experience of 15 years and above on similar projects.</td>
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<tr>
<td>9.1.4</td>
<td>Procurement &amp; Contract Manager, Graduate Engineer with experience of 15 years and above on similar projects.</td>
<td></td>
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</tr>
<tr>
<td>9.1.5</td>
<td>Construction Manager, Graduate Engineer with experience of 15 years and above on similar projects.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9.1.6</td>
<td>Boiler Expert with experience of 15 years or above on similar projects</td>
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<tr>
<td>9.1.7</td>
<td>Turbine Expert with experience of 15 years or above on similar projects</td>
<td></td>
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<tr>
<td>9.1.8</td>
<td>QA/QC Manager, Graduate Engineer with experience of 10 years and above on similar projects.</td>
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<td>0.5</td>
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<tr>
<td>9.1.9</td>
<td>HSSE Manager, Graduate Engineer with experience of 10 years and above on similar Projects.</td>
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<tr>
<td>9.1.10</td>
<td>Commissioning Manager, Graduate Engineer with experience of 15 years and above on similar projects</td>
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<td>1.5</td>
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</tbody>
</table>

Total score 100
Minimum points required for PQ=70
Minimum points required in each section=50
Please also refer to Section 3.3 and Table-1 of the PQ Document for EPC / Turnkey Contractor

If Applicant is a Joint Venture of companies than additional requirements of Section 3.4 of the PQD for EPC / Turnkey Contractor shall also be complied with by the Applicant. Please send a signed and stamped printout version of this questionnaire to the given postal address together with other PQ Documents.

Affidavit: The potential bidder declares that he has included correct and complete data in this sheet. Client shall disqualify and blacklist an Applicant if it finds, at any time, that the information submitted by him concerning his qualification as an Applicant was false and materially inaccurate or incomplete.

Herewith we confirm with our signature, that we filled out the questionnaire to the best of our knowledge completely and truthfully.

[Signature]

(Date, Place, Signature of the authorized representative of the company, Power of Attorney certified by notary Public to be submitted)
1 SCOPE OF WORK FOR EPC/TURNKEY CONTRACTOR

The following scope of work is indicative only and subject to change and alteration by the client at the time of tendering.

1.1. Introduction

EPC Contractor shall provide amongst others, detailed design and engineering, project management, materials, procurement services, logistics, transportation/freight forwarding, administration, fabrication, construction, pre-commissioning, commissioning, testing, start-up and trial operation, operational staff training and performance testing necessary to furnish an operational, approximately 22 MW Biomass Fired Power Projects on Turn-Key basis and O&M of the Plant after commercial Operation. In meeting that objective, Contractor shall fulfill the obligations and implement the requirements that are described below.

It is intended that Contractor's performance under this Contract shall include everything necessary to complete the approx.. 22MW gross Biomass Fired Power Plant and facilities notwithstanding the fact that every item necessarily involved may not be specifically mentioned. Details, which are not indicated by the specifications, shall be performed by Contractor at no extra cost if such details are necessary to complete the general intent of this contract.

The following summary scope of work is primarily intended to give the prospective EPC / Turnkey Contractors a brief overview of the quantum of work to be performed by the Contractor beyond the prequalification phase. Detailed scope of work will be provided to the prequalified Contractors at the time of bidding process.

1.2. General Project Description and Overall Design Parameters

The Project Description is given in document as Appendix-3.

1.2.1. The primary elements of this work scope are:

The main components of the Approx. 22MW Biomass Fired Power Projects forming the part of Contractor’s scope of work are listed below in general, a detailed scope will be provided in tender/bid document after pre-qualification.

a. Boilers

Biomass fired proven technology boiler to meet Steam requirement of respective Steam Turbine for 22 MW (Net) output at Generator terminals.

b. Steam Turbines Generator with key operational equipment

- Steam Turbines with ancillaries to drive 22 MW net generator
- AC Generators (22MW net) with ancillaries
- Main step up transformer
- Auxiliary transformers
- Station Service transformer
- HV/ MV/LV Switch Gears
- MV/LV Supply power Systems
- Protection and Control Panels.
c. Balance of Plant

- Cooling Water Systems
- Cooling Water pump House
- Water treatment Plant
- Clarifier Plant
- Fire Fighting pump House
- Demi Water Storage Tank
- Clarified Water Storage Tank
- Firefighting Water Tank
- Biomass Handling Facilities and Store yard
- Workshop
- Spare Parts Store

d. Other Facilities

In addition to above, following major facilities/ installations will also be provided / installed.

- SCADA system
- Telecommunication system including fiber optic cable and satellite links.
- Electrical system
- Administration Building
- Security system for all installations
- Fire and gas detection system
- Central Control Room

1.2.2. The Contractor shall review, verify and adopt the Client FEED engineering packages and documentation for the construction of pipeline and associated facilities and the three compressor station described above. Furthermore, Contractor shall be responsible for all data and technical information provided by the Client and shall complete the detailed design, procurement, installation and construction of the 22 MW gross, Biomass fuel Fired Power Projects.

1.2.3. The Contractor will be responsible for testing and commissioning of the Power project at its project site AARI, near chak jumra Faisalabad

1.2.4. The Contractor shall complete the detailed engineering in a good and workmanlike manner, to the satisfaction of the Client. The Contractor shall furnish all labour, procurement services, materials, tools, equipment, supervision, insurance and transportation, and shall perform all work mentioned, shown or reasonably implied in this Scope of Work.

1.3. Project duration/ General Requirements

1.3.1. Project time span is 565 days after award of EPC with O&M contract.

1.3.1. Environmental, Health and Safety (HSE) Requirements

At construction stage, contractor shall be required to perform all its activities in strict conformance with Client’s environmental, health and safety (HSE) requirements and all applicable laws and regulations of all jurisdictions at all locations where this work will be performed.
1.3.3. Local Content, Communities Relations and Training / Employment of The Local Workforce.

a. Subject to the terms of the Contract, Contractor is solely responsible for the selection of Suppliers, Vendors, Sub-Contractors and labor for the Work, subject to approval of Client. Notwithstanding the above, Contractor shall comply with the requirements of local law and maintain required levels of local content, fulfill the training requirements, employ labour and introduce Suppliers in accordance with the Pakistan Government policies.

b. As a mandatory government policy foreign Contractors are encouraged to associate or enter into joint venture with domestic Contractors or Sub-Contractors sharing maximum possible content of an EPC / Turn-key Project.

c. Contractor shall endeavor to first give preference to local labor and companies in the selection of Suppliers, Vendors, Sub-Contractors and labor, subject to such companies and labor being competitive in terms of cost, schedule and quality, and having the necessary qualifications and experience to perform the Work.

1.3.4. Security

Contractor shall be responsible for providing security during all phases of the Work, at all Work locations, and for complying with the relevant requirements of complying with security requirements at the bidding stage as per guidelines issued by Government of the Punjab.

1.3.5. Detailed Engineering

Contractor’s completion of the design and engineering includes the preparation of documents and drawings, flow schemes, data/requisition sheets, specifications, requisitions, instructions, detailed drawings, study reports, calculations, etc.

1.3.6. Coordination and Cooperation With Other Client’s Contractors

Client and Client’s Contractors may perform work in the Local area. In such case, Contractor shall coordinate its Work and co-operate with Client and Client’s Contractors to minimize disruption to Contractor’s workforce and Client and Client’s Contractors workforce.

1.3.7. Management of Changes (Moc)

Contractor shall control design changes, whether as a consequence of design development, vendor input, field or other identified conflict and discrepancies, or other causes. The management of such changes shall be in accordance with the Project Technical Requirements and in particular, in respect of project safety reviews (e.g. HAZOP, SIL etc) with the approval of client.

1.3.8. Project Controls and Administration

Contractor shall provide all resources, materials and services necessary to fulfill the Project requirements. Contractor shall provide a detailed procedure covering planning, work preparation, planning of resources, equipment and materials, scheduling, progress
control, progress reporting, trending, reporting local content, contract cost status, Health Environment and Safety (HES) metrics, changes, invoicing, status/progress meetings, communications, document control and electronic data management.

1.3.9. **Quality Management**

Contractor shall provide all resources required to implement an effective Quality Management System which conforms with ISO 9001 (latest addition). Contractor shall provide a plan for Client’s approval, detailing the requirements for the Quality Management System, QA/QC of his own works, inspection and testing. Client may appoint either third party inspectors or its own Consultant to ensure strict compliance with latest QMS requirements.

1.3.10. **Contractor to provide Offices, Facilities and Services to Client’s Project Team**

Contractor shall provide all required offices, facilities, equipment and services required for the use of Client and Client’s Contractors, to the Client’s required standards. Facilities and services as described shall be provided in each location where the Contractor shall perform Work.

1.3.11. **Procurement, Sub-Contracts and Material Management**

a. Contractor shall provide personnel, facilities and services necessary to manage, procure, expedite, inspect, test, store, transport and ship Materials and equipment required for the Work.

b. Contractor shall supply spare parts for (i) capital spares, (ii) 2 years operational spares, commissioning spares in accordance with the Project Technical Requirements as shall be defined at the bidding stage.

1.3.12. **Construction**

a. Contractor shall execute all construction operations in accordance with high standards of Safety, Quality Assurance and Quality Control. Contractor shall provide all necessary Materials, consumables, labor, supervision, management, services, construction plant and equipment, and tools for the Permanent and Temporary Facilities, including mobilization and demobilization to/from Work Areas, in or out of Country.

b. Contractor shall develop an overall construction strategy, taking into account any equipment/package pre-assembly outside the work area including inspection and in shop surveillance and related access, shipping time, lifting/movement or other transport consequences of pre-assembled equipment/package. The construction execution strategy shall address the optimum use of skid mounted Vendor Package Units, prefabrication and pre-assembly of major equipment and structural steelwork as applicable and economically viable and any other optimization Techniques Contractor may elect to employ.

c. The strategy should take account of the method of delivery of equipment to the Work Area, the subsequent transport and the need to ensure that the principle of
Constructability is maintained throughout all phases of the project.

d. Contractor shall be responsible for all work and services related to the construction of the project as described in the Project Technical Requirements and other Contract documents.

1.4. Contract Work Phases

Immediately after EPC award contractor will mobilize at site and local offices. The Work to be performed by the Contractor consists of various phases and include the activities described below.

1.4.1. Phase I – Detailed Engineering Design

a. Review Client's FEED Engineering

- The Client shall provide Front End Engineering Design for Project development. Contractor shall carry out all further detailed engineering necessary to provide a complete, operationally functional Biomass Fired Power Projects including optimum efficiency, reliability, constructability and maintainability. Such design development and detailed engineering design shall incorporate the highest standards consistent with safe and environmentally responsible operation of the Biomass Fired Power Projects.

- Contractor shall be responsible for ensuring that the capacity of the various Units, equipment and ancillaries, including distribution systems, when taken as a whole is sufficient to satisfy Contractor's guarantee obligations.

- Notwithstanding if an item, or description or specific statement about an element of the Work not contained in the Project technical requirements, Contractor is not relieved from its responsibilities under the Contract to provide all components necessary to ensure the pipeline system's operability, maintainability and safety are achieved according to the design intent. Contractor shall ensure and include all such items or elements within its Work to ensure a functional system, as if it were fully described and detailed.

- The Contractor shall be responsible for control system design, supply, and integration for the entire system. This includes integration of the proprietary control systems provided by various package equipment suppliers: others equipment as later determined.

- Also included in the overall control system design and integration are at least the following major systems:

  - SCADA and Telecoms systems, including the equipment supply for back-up control/dispatch system
  - Documentation to be provided by the Contractor
  - The documentation, which is provided to the Contractor as part of the FEED engineering is to be revised and/or developed as appropriate, but in either case
it is to be maintained up-to-date during the Work. Any alteration to any of these
documents must have the approval of Client.

1.4.2. Phase II – Procurement

a. The Contractor is responsible for producing all procurement specifications, data
sheets and any other documentation required to purchase all equipment, material and
services necessary to complete the project. The detailed engineering and
procurement may proceed side by side to achieve Project completion schedules.

b. Where such procurement activity has already been initiated by the Client, the
Contractor shall take over the unfinished part of the procurement proceedings and
complete the remainder scope of supply.

c. Contractor and all Vendors/Suppliers and Sub-Contractors shall be required to
provide equipment and materials from approved manufacturers only, as may be
approved in the Client’s Approved Vendors List at the time of bidding process.

1.4.3. Phase III– Construction

a. The Contractor is responsible for all activities associated with completing the
construction of the facilities within this Scope of Work. Contractor’s actual plans and
schedule are expected to have staggered dates of the various systems to reach the
overall Project readiness for Start-up to allow all systems to be functional on the dates
shown.

b. The Contractor shall be responsible for providing qualified and competent
construction engineers for the performance of the Work. Individual qualified engineers
shall be provided to cover all requirements for the piping, electrical, instrument,
mechanical and civil woks of the project.

c. Construction engineering shall include, but not be limited to, interpretation of
drawings, drawing verification, resolving field problems, liaising with the Client or the
Client’s Engineers and/or Site Representatives, basic design work as required on
drawings. Specifications, and reviewing and submitting technical queries and
proposed solutions to the Client.

d. Construction engineers shall be proficient in the application of the Contract codes,
standards and Construction specifications. Construction engineers shall prepare
drawings for review where Scope of Work requires site work or design.

e. Also, the logistics associated with getting materials and equipment to the various sites
is to be performed by the Contractor. The Scope of Work for the Contractor includes
the transportation of all project equipment and materials from the dock facilities or
from any other location to the final work site. This includes the provision of any
specialized equipment for transportation of heavy or oversized loads, especially
transportation of major equipment from port of entry to Project site.
f. Client shall obtain right-of-way easements, and licenses if necessary for The execution and operation of the project. Client shall facilitate in obtaining permits necessary for the construction that must be obtained as required by governmental authorities. Consultant on behalf of Client shall obtain approvals related to the EIA.

g. Client shall furnish to Contractor a summary of right-of-way and permit conditions affecting construction of Approx. 22 MW biomass Power Project and appurtenant facilities. Contractor shall comply with these conditions unless specifically amended by Client in writing.

1.4.4. Phase IV – Pre-commissioning, Commissioning, Testing, Start-Up and Handover to Owner.

Pre-Commissioning

a. Contractor shall include for all pre-commissioning Work and associated documentation necessary to bring all Units into the state of “Ready for Commissioning”.

b. Contractor shall follow these procedures as the basis of the Pre-commissioning methodology to be utilized during the course of the project as well as defining the input and support to be provided by other parties.

c. Contractor shall make itself fully aware of all pre-commissioning requirements and start-up of approx. 22 MW biomass fired Power Projects in a timely and orderly manner after approval by the Client as shall be set out in technical requirements of the plant. Contractor shall accordingly provide/supply all necessary engineering and other labor, services (including those of Vendor Representatives), utilities, consumables, testing equipment, and any other requirements necessary to meet this objective.

Pre-Commissioning Scopes of Work

- Completion of all construction works, static testing and mechanical discipline pre-commissioning for all process, rotating static equipment and systems to achieve Mechanical Completion. This shall include Hydraulic testing, chemical cleaning of various systems etc. as appropriate and all necessary preservation.

- Instrumentation and Control discipline Pre-commissioning to achieve all Instrument Completions. All instrumentation shall be calibrated and loop checked and control systems will be brought to a fully functional state including all Cause & Effect tests and all interface testing between SCADA, FSS, F&G (building) and Vendor package control systems.

- Electrical discipline Pre-commissioning to achieve all Electrical Completions. All electrical generation, distribution, storage, switching and control systems shall be made ready for energization including all insulation testing and hi-pot testing as appropriate. All protective relay calibration and settings shall be carried out and
witnessed in accordance with Project Technical Requirements. Temporary energization of motors
testing is included.

- All other necessary works on common facilities to co-ordinate with the above activities.
- All necessary statutory inspection and testing by third party and applicable Authorities at all stages of the work.
- Maximizing pre-commissioning and testing in offsite locations, including fabrication / pre-assembly yards.

Commissioning & Start-Up by contractor shall include for all commissioning work and start up of the facilities and associated documentation necessary to bring all units into the state of “ready for commercial operation”

**Commissioning and Start Up Scope of Work**

The Contractor is responsible for the commissioning of the approx. 22 MW biomass fired power plant. Activities during the commissioning phase will include, but are not limited to:

- Initial commissioning of the Project;
- Test Runs/Realiability Run Test.
- Performance Tests as per Contract Provision.
- Declaration of Commercial Operation of Plant.

**Operation and Maintenance Documents**

Contractor shall prepare the following documentation for operation and maintenance:

- Operating manuals and procedures
- Maintenance manuals and procedures, including work plans and job descriptions
- Maintenance database for all equipment to be incorporated into Client’s management software system
- Operators Training
- Emergency response plans for the operation phase

**As-Built and Final Documentation**

Contractor shall be responsible for providing and maintaining accurate as-built documentation and records throughout the course of the Work. As-built documentation shall be presented to Client for review and approval in an orderly fashion upon completion of the Work. The Contractor will provide, as a minimum, all of the as-built documentation, complete with supporting hard copy documents and USBs.

As a minimum, as-built documentation shall consist of all changes to Contract Drawings, vendor drawings, QA/QC documents and test reports. As-built documentation shall include all work performed by Contractor including work performed under Change Orders, regardless of method of payment.

Contractor shall provide a complete final documentation dossier, including engineering dossier, as built, inspection and test reports, vendor documentation, manufacturing books, equipment database, GIS warehouse, etc.
General Project Description and Overall Design Parameters

A. Land, Site Development and Preliminary Civil Works
   - Land survey
   - Soil investigation
   - Preliminary expense
   - Site cleaning
   - Grading
   - Boundary wall
   - Fencing,
   - Plant roads
   - Culverts
   - Drains and Trenches

B. Civil, Structure and Architectural Works
   - Civil works for boiler
   - Auxiliary foundation
   - Civil works for turbine foundation
   - Power house building
   - Rcc chimney
   - Raw water reservoir
   - Cooling tower
   - Raw water forebay
   - Water treatment plant
   - Pre-treatment plant
   - Effluent Treatment plant storage tanks
   - Biomass handling plant civil works
   - Ash handling plant civil works
   - Transformer yard and switchyard
   - Plant buildings
   - Pump houses and Storage sheds
   - Administration building
   - Security office
   - Parking shed
   - Pipe rack
   - Cable rack and pipe sleepers
   - Ash dump
   - Green belt development
   - General civil works and miscellaneous items.
C. Boiler, Turbine Generator and Mechanical Balance Of Plant

- Steam generator and auxiliaries including fuel oil system
- Steam turbine generator and auxiliaries
- Biomass handling plant
- Ash handling plant
- Cooling tower
- Cw, acw and miscellaneous pumps
- Water treatment plant
- Lp piping
- Heating, Ventilation And Air Conditioning
- Fire Detection And Protection
- Eot Crane And Miscellaneous Cranes And Hoists
- Compressed Air System
- Miscellaneous Tanks And Pumps
- Workshop And Laboratory Equipment
- Borewell Pump And Piping
- Raw Water Pumps
- Raw Water Piping

D. Electrical, Control and Instrumentation

- Air Insulated Switchyard bays
- Power transformers
- LT and VFD transformers
- HT switchgear
- HT bus duct
- LT switchgear
- VFD panel
- Power and Control cable including trays
- UPS system
- Battery and Battery charger
- DG set
- Plant communication
- Electrical supply
- Generator circuit breaker
- Station lighting
- Earthing and Lightning protection
- Feeders for borewell pumps
- Transmission lines
- DCS
- Instrument cables, environment monitoring system and miscellaneous control and instruments,

Covering Scope of work deficiency

- EPC will provide/install/commission all necessary system/equipment required for plant and its related necessity, for plant operation at full capacity.
Non-Disclosure AGREEMENT

THIS AGREEMENT is entered into as of the ___ day of ____ year ______ by and between:

Punjab Power Development Company Ltd (PPDCL) Lahore, Pakistan (hereinafter referred to as “Client”) which expression shall, where the context so permits, be deemed to mean and include its successors-in-interest and assigns of the First Part.

And

_________________________________________, a company incorporated under the laws of having __________________________________________________________ its registered office at

(hereinafter referred to as “Applicant”) which expression shall mean and include its successors-in-interest, authorized representatives, employees, management, assigns, and Affiliates of the Second Party.

Whereas the Client, in order to pre-qualify companies for Engineering Procurement and Construction (EPC) including O& M of the approx. 22 MW gross, biomass, Power project, has floated pre-qualification document (along with appendices);

Now therefore, the Parties have agreed to enter into this Confidentiality Agreement with the following terms and conditions.

In this Agreement, the following words and expressions shall have the following meanings:

Definitions:

“Affiliate” shall mean any company or legal entity which (a) controls either directly or indirectly the Applicant, or (b) which is controlled directly or indirectly by the Applicant, or (c) is directly or indirectly controlled by a company or entity that directly or indirectly controls the Applicant;

For the purpose of “Affiliate” definition the word “control” shall mean the possession, directly or indirectly, of the power or cause the direction of the management and policies of a company or entity, whether through the ownership of a majority or other controlling interest in the voting securities, equity or other ownership interest in an entity, by law or by agreement between Parties conferring such power or voting rights and controlled shall be construed accordingly.

“Agreement” shall mean this Confidentiality Agreement;

“Confidential Information” means all or any information in whatever form (including, without limitation, in written, oral, visual or electronic form, or on tape or disk) relating to the Project, that is part of the prequalification documents for EPC or all or any information that is received by the Applicant from the Client in relation to the EPC work for the project through clarifications or explanation, etc.;

“Client” and the “Applicant” hereinafter individually referred to as a “Party” and collectively as the “Parties”; and
“Prequalification document for EPC”, in relation to the pre-qualification of companies for Engineering Procurement and Construction (EPC) with O & M of the approx. 22 MW gross, Biomass Power project, shall mean the pre-qualification document (along with appendices).

1. The Applicant hereby unconditionally agrees that the Confidential Information received by it in the form of prequalification document for EPC shall be kept strictly confidential and shall not be sold, traded, published, transmitted or otherwise disclosed through any media whatsoever including but not limited to open telephone, telegraph, or facsimile communications channel or by Internet to anyone in any manner whatsoever, without the Client’s prior written consent, except as provided in paragraphs 4, 5 and 6 below.

2. The control over compliance with the procedure of use and storage of all Confidential Information that is disclosed by the Client to the Applicant in accordance with this Agreement shall be vested at the Applicant, with the authorized employees of the Applicant.

3. The Applicant may disclose the Confidential Information without the PPDCL prior written consent only to the extent such information:
   a) is already in possession of the public or becomes available to the public other than through the act or omission of the Applicant or through breach of this Agreement; or
   b) is required to be disclosed under compulsions of the applicable law or by a governmental order, court of competent jurisdiction acting in pursuance of its powers, decree, regulation or rule provided that the Applicant shall give written notice to the Client prior to such disclosure or immediately after such disclosure; or
   c) is acquired independently from a third party that represents that it has the right to disclose such information at the time it is acquired by the Applicant.

4. The Applicant may disclose the Confidential Information, without the Client’s prior written consent, to an Affiliate Company provided that the Applicant shall procure that the Affiliate shall have adopted and agreed to in writing with the terms of this Agreement.

5. The Applicant shall be entitled to disclose the Confidential Information without the Client’s prior written consent, by making them aware about the confidential aspect of the information subject of the present Agreement, to such of the following persons who have a clear need to know in order to operate the Activities:
   a) employees, officers and directors of the Receiving Party, that are directly linked to the project subject of the Confidential Information;
   b) employees, officers and directors of an Affiliate Company, that are directly linked to the project subject of the Confidential Information;
   c) any professional Consultant retained by the Applicant or an Affiliate Company for the purpose of evaluating the Confidential Information;
   d) any bank from which financing is sought by the Applicant to operate the Activities, including any professional Consultant retained by such bank for the purpose of evaluating the Confidential Information; and
e) to the respective Governments and its agencies only for taking permissions, consents and approvals.

Prior to making any such disclosures to persons under sub-paragraphs (c) and (d) above, however, the Applicant shall obtain an undertaking of confidentiality, in similar form and content as this Agreement, from each such person.

6. The Applicant shall not use or permit the use of the Confidential Information disclosed under Paragraphs 4 and 5 above except to the extent necessary to operate the Activities.

7. The Applicant shall be responsible for ensuring that all persons to whom the Confidential Information is disclosed under this Agreement shall keep such information confidential and shall not disclose or divulge the same to any unauthorized person or entity. At that, the liability of the Applicant for a breach of this Agreement shall be limited by direct damage caused to the Client and shall not encompass the loss of profit of any kind.

8. The disclosure of Confidential Information pursuant to this Agreement and any prior or future discussion or other communications between the Parties shall not confer any right nor impose or create any obligations on the Parties other than those expressly agreed in writing.

9. The Confidential Information shall remain the property of the Client, and the Client may demand the return thereof at any time upon giving written notice to the Applicant. Within thirty (30) days of receipt of such notice the Applicant shall return all the original Confidential Information, and shall destroy all copies and reproductions (both written and electronic) in its possession and in the possession of the persons to whom it was disclosed pursuant to Paragraphs 4 and 5 hereof.

10. This Agreement shall remain in force for three (3) years from the date of its signing by the Parties.

11. The Client, its officers, directors and employees shall have no liability whatsoever with respect to the use of or reliance upon the Confidential Information by the Receiving Party. It is acknowledged by the Receiving Party that all confidential information remains proprietary to the Client which shall retain all rights, title and interest in the Confidential Information.

12. The present Agreement must not be construed or interpreted as granting to the Applicant the right of exploiting the Confidential Information in some projects others than those directly relative to the present Agreement.

13. No amendments, changes, or modifications to this Agreement shall be valid except if the same are in writing and signed by a duly authorized representative of each of the Parties hereto.

14. This Agreement shall be governed by and interpreted in accordance with the laws of Pakistan in force.

15. Any dispute arising from or in connection with the present Agreement that cannot be settled amicably by the Parties during negotiations within thirty (30) days, shall be settled in accordance with the Arbitration Act, 1940. The arbitration shall be conducted by the sole arbitrator who shall be appointed by the Parties. A dispute shall be deemed to have
arisen when either Party notifies the other Party in writing to that effect. The resulting award shall be binding on both the Parties. The arbitration will take place in Islamabad. The language of the arbitration shall be English.

In Witness Whereof, the duly authorized representatives of the Parties have caused this Agreement to be executed.

__________________________________  __________________________________
For and on behalf of                        For and on behalf of
Punjab Power Development Company Ltd (PPDCL)  Applicant
(Client)

In the Presence of following two Witnesses:

__________________________________  __________________________________