

Rural Power Company Limited

Request for Expression of Interests (EOI)

For

The Procurement of Consultancy Services for the Project "Construction of 100 MW Solar Power Plant at Madarganj in Jamalpur District", Bangladesh

EOI REF. NO. : PUR-006(MADARGANJ100MW/EOI)/2021-2022, Date: 04.10.2021

October-2021


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RURAL POWER COMPANY LIMITED
Request for Expression of Interest (Firm)

1	Ministry/Division	Ministry of Power, Energy and Mineral Resources/Power Division
2	Agency	Rural Power Company Limited
3	Procuring Entity Name	Executive Director (Engineering), Rural Power Company Limited
4	Procuring Entity code	Not used at present
5	Procuring Entity District	Dhaka
6	Expression of Interest for Selection of	The Procurement of Consultancy Services for the Project "Construction of 100 MW Solar Power Plant at Madarganj in Jamalpur District", Bangladesh.
7	EOI Ref. No.	PUR-006(MADARGANJ100MW/EOI)/2021-2022, Date: 04/10/2021
8	Date	04/10/2021
KEY INFORMATION		
9	Procurement Method	Quality & Cost Based Selection (QCBS)
10	Budget and Source of Funds	RPCL Own Fund
11	Development Partner (If applicable)	As per approved DPP. EPC Cost of the project will be provided by Exim Bank, India under LoC-III.
PARTICULAR INFORMATION		
12	Project/ Program code	Not applicable
13	Project/ Program name	The Procurement of Consultancy Services for the Project "Construction of 100 MW Solar Power Plant at Madarganj in Jamalpur District", Bangladesh.
14	EOI closing date and time	24/10/2021 at 12:00 Noon
INFORMATION FOR APPLICANT		
15	Brief description of the assignment	<p>The Procurement of Consultancy Services for the Project "Construction of 100 MW Solar Power Plant at Madarganj in Jamalpur District", Bangladesh. The assignment will include the following :</p> <ol style="list-style-type: none"> 1. Review Feasibility Study done by EQMS Consulting Limited, Bangladesh 2. Preparation of Drawing Design, Specifications, Bill of Quantities (BoQ) of Land Development, Embankment, Road Construction work 3. Preparation of Drawing Design, Specifications, Bill of Quantities, EPC Tender Document of 100 MW Solar Power Plant 4. Preparation of Drawing Design, Specifications, Bill of Quantities, EPC Tender Document of 132 kV double circuit transmission line from proposed 100 MW solar power plant to Ghatial grid substation of Power Grid Company of Bangladesh (PGCB). 5. Supervision of 132 kV trans-mission line and substations installation works 6. Preparation of Route Survey and Compensation Assessment Report for land, tress, crops, others asset on the route of 132 kV trans-mission line and substations installation 7. Assistance in Bidding Process 8. Review and Recommendation for Approval of all drawing design submitted by the EPC. 9. Supervision of Land Development, Embankment, Road Construction, Solar Plant Installation & Construction works during Implementation Period 10. Inspection, Testing & Commissioning Supervision of 100 MW Solar Power Plant 11. Assist project management at all levels 12. Certification of contractor's supply, works, service, different inspection, installation and testing activities 13. Review and Certification of acceptance test certificate of all equipment of the power plant 14. Facilitation of implementation of Environmental Management Plan (EMP), Environmental Monitoring Plan (EMoP) 15. Technology transfer 16. Required Report and Document Preparation 17. Others relevant services mentioned in the Terms of Reference (TOR)
16	Experiences, Resources and Delivery capacity required.	<p>Application has been invited from the competent consulting firms who have at least provided Consultancy Services within the last 10 years for-</p> <ol style="list-style-type: none"> 1. Preparation of Drawing Design of Land Development, Embankment and Supervision of that works 2. Design and Construction Supervision of a Solar PV power plant project with minimum capacity 25 MW in a single contract. 3. Design and Construction Supervision of a 132 kV 10 km transmission line in a single contract. <p>Consulting firm may form Joint Venture/Consortium/Association (JVCA). In such case, Lead partner must have experience in the field of consulting services involving preparation of Tender Document, Design Review and Approval, Construction supervision, Testing & Commissioning Supervision within the last 10 years, for at least one (1) Solar PV power plant project with minimum capacity 25 MW. Other partners should have remaining required experience to qualify. Any one Joint Venture/ Consortium/ Association member shall not be allowed to participate with more than one Applicant.</p>
17	Other details (if applicable)	<p>The intending consulting firms should collect the "Detailed Terms of Reference as well as Eoi document" from the RPCL office by submitting an application to the Executive Director (Engineering), Rural Power Company Limited, House No.-19, Road No.-1/B, Sector No.-09, Uttara Model Town, Dhaka-1230, Bangladesh during office hours till 21/10/2021. The document is also available in RPCL's website (www.rpcl.gov.bd) for reference only. The EOIs would be reviewed on the basis of the following:</p> <ul style="list-style-type: none"> • Registration and age of Firm • Experience of the firm in similar task • Availability of key professionals • Availability of resources • Managerial strength and financial capacity • Experience of the firm in other works <p>Any application submitted later than the specified time shall not be entertained. A short list of Applicants will be made by evaluating the received applications in accordance with PPR-2008. RFP will be issued to short listed firms.</p>
18	Association with foreign Firm is	Encouraged
19	Place of EOI submission	Rural Power Company Limited, House No.-19, Road No.-1/B, Sector No.-09, Uttara Model Town, Dhaka- 1230. Bangladesh.
PROCURING ENTITY DETAILS		
20	Name of official Inviting EOI	Md. Salim Bhuiyan, PEng
21	Designation of official Inviting EOI	Executive Director (Engineering)
22	Address of official Inviting EOI	Rural Power Company Limited, House No.-19, Road No.-1/B, Sector No.-09, Uttara Model Town, Dhaka- 1230. Bangladesh.
23	Contact details of official Inviting EOI	Phone: +88-02-48961201, Fax: +88-02-48963229, E-mail: edengg@rpcl.gov.bd , Website: http://www.rpcl.gov.bd
24	Special Instruction	The Procuring Entity reserves the right to accept any or reject any/all applications without assigning any reason.


 (Md. Salim Bhuiyan, PEng)
 Executive Director (Engineering)
 Rural Power Company Limited



INSTRUCTION TO THE APPLICANTS

1. Application of the interested firms must include:

- a. Name of the Principal Firm with complete address, Cable, Fax, Telephone Nos. E-mail address etc.
- b. Name of the Associated Firm (if any) with complete address, Cable, Fax, Telephone Nos., E-mail address etc.
- c. Notarized Joint Venture/Consortium/Association Agreement (JVCA) on Non-Judicial Stamp of the firms (in case of Joint Venture/Association with another firm) for the said consulting service. The value of Non-Judicial Stamp should be Tk. 300.00 (Three Hundred Taka).
- d. The name of the employees/owner(s) of the firms and corporate profile of the firms.
- e. The name and qualification of the Management/Administrative Personnel.
- f. List and qualification of the key-personnel likely to be involved in the proposed consulting service.

The proposed fields of expertise for the said consulting service would be at least the following:

SN	Position	Number of Persons	Months	Estimated Man-Months
1	Solar Power Plant Expert (Team Leader)	1	36	36
2	Mechanical Engineer (Power Plant Expert)	1	3	3
3	Mechanical Engineer (Substation & Transmission line Expert)	1	4	4
4	Electrical Engineer (BoP and Substation Expert)	1	6	6
5	Electrical Engineer (Transmission line Expert)	1	12	12
6	Protection, I&C Expert	1	2	2
7	Civil Engineer	1	28	28
8	Civil Engineer (Transmission line Expert)	1	10	10
9	Geotechnical Specialist	1	4	4
10	Structural Engineer	1	3	3
11	Solar PV Specialist	1	12	12
12	Environmental Specialist	1	5	5
13	Social safe guard Specialist	1	4	4
14	Procurement cum Contract Specialist	1	6	6
15	Auto CAD Operator	1	3	3
Total		15	138	138

- g. Identity, Structure, Organization of the firms(s) including copies of the documents defining the constitution or legal status, place of registration and principal places of business and/or principal offices of the company/firm.
- h. Details of vehicles, instruments & office equipment the firm owns.
- i. Audited Financial Statements of the firm for the last five fiscal years.

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- j. Experience of the firms along with a list of similar work at hand or carried out since 2008. The Consultant must submit the end user certificate in support of experience.
 - k. The Consultant should submit the signed CV of the proposed professional staff the CV must contain photography of the experts.
2. Applicant must submit information using the attached table/format **[Annexure-1 to 6]** with the document. The submitted document must be **one original, three copies with a soft copy in word format (with CD)** sealed and signed by a person duly authorized by the consulting firm. Soft copy will not be evaluated. Only hard copy will be evaluated.





Curriculum Vitae (CV) for Each Proposed Professional Staff [CV will be maximum within two (02) pages (Short Biography) & the consulting firm shall have to be submitted a soft copy of Annex-1 along with EOI document].

- 1 PROPOSED POSITION FOR THIS PROJECT : *[From the Terms of Reference, state the position which the Consultant will be engaged. Only one candidate shall be nominated for each position].*

- 2 NAME OF PERSON : *[state full name]*

- 3 DATE OF BIRTH :

- 4 NATIONALITY :

- 5 MEMBERSHIP IN PROFESSIONAL SOCIETIES : *[state rank and name of society and year of attaining that rank].*

- 6 EDUCATION : *[list all the colleges/universities which the consultant attended, stating degrees obtained, and dates, and list any other specialized education of the consultant]*

- 7 OTHER TRAINING : *[indicate significant training since degrees under education were obtained, which is pertinent to the proposed tasks of the consultant].*

- 8 LANGUAGES & DEGREE OF PROFICIENCY :

Language	Speaking	Reading	Writing
e.g. English	Fluent	Excellent	Excellent

- 9 COUNTRIES OF WORK EXPERIENCE :

- 10 EMPLOYMENT RECORD : *[The Consultant should clearly distinguish whether as an "employee" of the firm or as a "Consultant" or "Advisor" of the firm].*
[starting with position list in reverse order every employment held and state the start and end dates of each employment]
[The Consultant should clearly indicate the Position held and give a brief description of the duties in which the Consultant was involved].

EMPLOYER 1 : FROM: TO:
[e.g. January 1999] [e.g. December 2001]

EMPLOYER 2 : FROM: TO:

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EMPLOYER 3 : FROM: TO:

EMPLOYER 4 : FROM: TO:

11 WORK UNDERTAKEN THAT BEST ILLUSTRATES YOUR CAPABILITY TO HANDLE THIS ASSIGNMENT : [give an outline of experience and training most pertinent to tasks on this assignment, with degree of responsibility held. Use about half of a page A4].

CERTIFICATION [Do not amend this Certification].

I, the undersigned, certify that (i) I was not a former employee of the Client immediately before the submission of this proposal, and (iii) to the best of my knowledge and belief, this bio data correctly describes myself, my qualifications, and my experience. I understand that any willful miss-statement described herein may lead to my disqualification or dismissal, if engaged.

Signature

Date of Signing

Day / Month /Year

Note: The applicant shall have to be submitted a soft copy of Annex-1 along with EOI document.



Name and Qualification of Management/Administrative Personnel

Serial No	Name of the Personnel	Position at the Firm	Temporary/ Permanent	Educational Qualification (Name of the Exam....., Passing year....., University....)	Experience in years

Note: The applicant shall have to be submitted a soft copy of Annex-2 along with EOI document.

Handwritten signature and a faint circular stamp.



Financial Statement

Summary of Assets & Liabilities:

SN	Year	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
1	Total Assets					
2	Total Liabilities					
3	Total investment					
4	Operative Expenditure					
5	Taxes Paid					
6	Profit after payment of Taxes					
7	Turnover					

Note: The applicant shall have to be submitted a soft copy of Annex-3 along with EOI document.

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Details of Vehicles, Instrument and Office Equipment

Annex-4

Sl, No.	Name, Brand of the Vehicles/Equipment, Year of Manufacture	Model No., Serial No./ Registration No.	Present Condition

Note: The applicant shall have to be submitted a soft copy of Annex-4 along with EOI document.

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Similar Experience of the Firm

The following format should be used to indicate the similar experience of the firm in projects.

Project Name		
Project Location	Start Date (M / Y)	Completion Date (M / Y)
Name of the Client with address and Contact number		
Contract amount		
Name of the associated firm (if any)		
Narrative description of actual service provided by the firm for the project:		

Name of the Firm:.....

Signature of the authorized signatory:

Note: 1. Experience must be supported by a certificate issued by respective client.

3. The applicant shall have to be submitted a soft copy of Annex-5 along with EOI document.



Experience of the firm in other works

Sl. No.	Name of Services	Name of Client with address and Contact number	Contract amount	Start date	Completion time

Note: 1. The applicant shall have to be submitted a soft copy of Annex-6 along with EOI document.



Terms of Reference

For

The Procurement of Consultancy Services for the Project "Construction of 100 MW Solar Power Plant at Madarganj in Jamalpur District", Bangladesh.

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1.0. Introduction

Rural Power Company Limited (RPCL) was registered as a public limited company from the register of joint stock companies & firms on 31st December 1994 to alleviate severe power crisis of the country. The company is presently generating 392MW of electricity from its 4 (four) power station. RPCL has implemented a 150 MW dual fuel power plant project at Kodda, Gazipur forming a JV company with BPDB which is in operation. RPCL has over the years gained experience in project implementation and operation & maintenance of power plants. This has given the company an edge over others in becoming the leading Bangladeshi company with three operating plants of its own.

For enhancement of generation capacity and achieving the target of Renewable Energy Policy 2008 and the Power System Master Plan-2016, Rural Power Company Ltd. (RPCL) has taken initiative to implement a 100 MW Solar Power Plant at at Kaizerchar Mouza of Jurkhali Union, Under Madarganj Upazilla of Jamalpur District. The site has been selected through a comprehensive site selection study. The Feasibility Study of the project has been completed by EQMS Consulting Limited, Bangladesh. The geographic location of the selected site is 24°49'37.70"N and 89°41'54.12"E. The proposed project site is situated 1.3 km east of Jamuna River. The proposed project location is about 142 km, 38 km and 9 km away from Dhaka City, Jamalpur District and Madarganj Upazila respectively. The total land of the Proposed Solar PV Power Plant location is approximately 325.6536 acres. At present RPCL has planned to construct a Solar Power Plant of 140.74 MWp there. Total 325.6536 Acres of Khas Land has been allotted from Ministry of Land for the project under Long Term Lease. The energy produced by this project will be evacuated to 132/33kV Ghatail grid substation at Tangail District of Bangladesh. A new substation will be constructed in the PV project land to raise the voltage from 33kV to 132kV. A totally new 132 kV 47 km double circuit transmission line will also be constructed from the project site and Ghatail grid substation at Tangail District of Bangladesh.

The project will be implemented under Indian Line of Credit (LoC-III).

2.0. Scope of Work for the Consultant

2.1. Objective of Services:

The objectives of the consulting services shall be to ensure that the Project is implemented with a high standard of workmanship and quality, on schedule, and within the budget, in accordance with the specifications and drawings of the EPC Contract, to acceptable environmental and social standards and in accordance with the Bangladeshi law and rules, RPCL's requirements and the Indian Exim Bank's Safeguard Policies.

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2.2. General

The Client, RPCL is intending to procure the Project on a turnkey basis, with the EPC Contractor to be responsible for the delivery of the engineering, design, construction, supply, installation and erection, Testing & Commissioning Supervision and commissioning of the Project.

The Consultant shall assist RPCL to select a suitable and capable EPC Contractor, then administrate and supervise the EPC Contractor to fulfill the EPC Contract properly.

2.3. There are two phases for the Consultant to render the Service.

Phase 1: Selection of the EPC Contractor for the Project

Phase 2: Administration of the EPC Contract and supervision of the EPC Works of the EPC Contractor

During the two phases, the Consultant shall:

- (a) at all times exercise reasonable skills, care, faith, and diligences in execution of his duties in order to be responsible to ensure that the goods and services used for the Project are suitable and having reasonable cost.
- (b) maintain close coordination with RPCL, other agencies and other consultants related to the Project, and carefully manage implementation schedule to complete the service in time.
- (c) conduct project management at all levels including periodic review of budget estimate and administration of project cash flows.
- (d) maintain confidentiality and shall not disclose any information come to know through the services without written consent by the Client.
- (e) be proficient in all the international accepted standards and codes applicable to the Project.
- (f) perform his duties during the construction period in accordance with the contracts to be executed between the Client and the contractors.
- (g) assist the Client to prepare tender document in sufficient detail to ensure clarity and understanding for Client and other relevant stakeholders for the EPC tendering which shall comply with FIDIC Silver Book 1999 Edition.

The tender document shall be prepared based on the available information of the Feasibility Study, Consultant's own experience and expertise in accordance with latest revision applicable bellow listed of internationally recognized codes and standards for the manufacturing, assembling Testing & Commissioning Supervision installing and commissioning the power plant components, systems, and equipment. If relevant Bangladeshi Standards and Codes are mandatory according to Bangladesh regulations and laws in this case relevant Bangladeshi Standards and Codes will be followed.

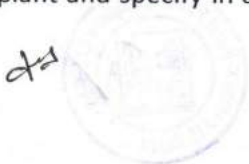
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List of internationally recognized codes and standards

ACI	American Concrete Institute
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute, Inc.
API	American Petroleum Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing & Commissioning Supervision and Materials
AWS	American Welding Society
AWWA	American Water Works Association
HEI	Heat Exchange Institute
HIS	Hydraulic Institute Standard
IEC	International Electro-technical Commission
IEE	Institute of Electrical Engineers
IEEE	Institute of Electrical and Electronics Engineers
ISO	International Organization for Standardization
JIS	Japan Industrial Standard
MSS	Manufacturer's Standardization Society of the Valve and Fittings Industry
NACE	National Association of Corrosion Engineers
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
SSPC	Steel Structures Painting Council
TEMA	Tubular Exchanger Manufacturers Association

The prepared tender document should include suitable technical specifications which will cover the performance requirements for delivery of a fully functional, environment-friendly, high efficient PV solar power plant and specify in detail the scope of work for the EPC Contractor. Such specifications will also



contain those in relation to i) quality control of plant materials and workmanship, ii) safety, and iii) protection of the environment.

The tender document shall be prepared by consultant in close consultation with client followed by the Public Procurement Act-2006 and Rule 2008 of Bangladesh, Indian Line of Credit (LoC III) Agreement, and will be approved by the Client and Exim Bank, India.

In this context, the consultants shall conduct:

Phase 1:

- (1) Review Feasibility Study done by EQMS Consulting Limited, Bangladesh fixing up the design parameter for preparing the tender document
- (2) Preparation of Drawing Design, Specifications, Bill of Quantities (BoQ) of Land Development, Embankment, Road Construction work
- (3) Preparation of Drawing Design, Specifications, Bill of Quantities, EPC Tender Document of 100 MW Solar Power Plant
- (4) Preparation of Drawing Design, Specifications, Bill of Quantities, EPC Tender Document of 132 kV double circuit transmission line (Approx. 50 kM) from proposed 100 MW solar power plant to Ghatial grid substation of Power Grid Company of Bangladesh (PGCB).
- (5) Preparation of Route Survey and Compensation Assessment Report for land, trees, crops, others asset on the route of 132 kV trans-mission line and substations installation
- (6) Assistance in Bidding Process

Phase 2:

- (1) Review and Approval of all drawing design of Land Development, Embankment, Road Construction work, Transmission line and all drawing submitted by the Engineering Procurement and Construction (EPC) contractor related to the 100 MW solar Power Plant
- (2) Supervision of Land Development, Embankment, Road Construction, Solar Plant Construction & Installation and others civil works under EPC during Implementation Period
- (3) Testing & Commissioning Supervision of 100 MW Solar Power Plant
- (4) Supervision of 132 kV trans-mission line and substations installation works
- (5) Testing & Commissioning Supervision of 132 kV trans-mission line
- (6) Assist project management at all levels
- (7) Inspection, and Delivery control during manufacturing
- (8) Certification contractor's supply, works, service, different installation and testing activities
- (9) Review and Certification of acceptance test certificate of all equipment of the power plant
- (10) Facilitation of implementation of Environmental Management Plan (EMP), Environmental Monitoring Plan (EMoP)
- (11) Technology transfer

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- (12) Required Report and Document Preparation related to the project and project management

2.4. Review Feasibility Study fixing up the design parameter for preparing the tender document

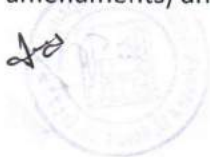
The Consultant shall:

- (a) Review Feasibility study, primary and secondary data collected during the Feasibility stage. Collected the primary data (such highest flood level, Yearly raining data, elevation of the project area by topographic survey, soil condition through geotechnical survey, others metrological data, geological, Ecological data and others data if any necessary) for preparing design parameters of solar power plant, land development, embankment and land protection, road development, drainage system, foundation, land protection boundary, transmission line construction. Consultant shall prepare necessary drawing design, specification of every item in tabular format, BoQ, for preparing the successful tender document;
- (b) Based on the design parameter consultant shall prepare a tender document in close consultation with client followed by the Public Procurement Act-2006 and Rule 2008 of Bangladesh, Indian Line of Credit (LoC III) Agreement, and will be approved by the Client and Exim Bank, India.
- (c) Prepare the project cost estimate originally envisaged and recommend modification or adjustment if necessary, so that all the works originally can be completed within the original cost estimates;
- (d) Prepare project expected implementation schedule and modify if necessary during project time period.
- (e) Provide any other relevant assistance

2.5. Assistance in Bidding Process

The Consultant shall assist the Client to:

- (a) Select qualification criteria including but not limited to the eligibility requirements, such as i) joint venture requirement; ii) general experience requirement; iii) specific experience requirement; iv) financial capability; v) organizational capability and others.
- (b) Prepare, check and review bidding documents for Project in accordance with internationally recognized codes and standards mentioned above and FIDIC Silver Book 1999 Edition together with all relevant specifications, drawings and other documents;
- (c) Prepare bidding documents which includes the clauses to have Contractor comply with the requirement of the ECA, 1995 (including all amendments) and ECR, 1997 (including all amendments) and recommendation of Environmental Study report of the Project.



- (d) Issue bid invitation, conduct pre-bid conferences, issue addendum/corrigendum, and reply to bidders' queries.
- (e) Examine and evaluate bids in accordance with the criteria set forth in the bidding documents. In such evaluation, the Consultant shall carefully confirm that bidders' submissions in their technical proposal including, but not limited to, site organization, mobilization schedule, method statement, reasonable construction time schedule, safety plan, EMP, and reasonableness of price have been prepared in harmony each other and will meet such requirements set forth in applicable laws and regulations, specifications and other parts of the bidding documents;
- (f) Prepare a Bid evaluation report in communication with the Bid Evaluation Committee making clarification to the Evaluation Committee members, if requested.
- (g) Prepare a bid evaluation report for approval of the bid evaluation committee, taking into considerations to comments of the Client and Financing Agency on draft evaluation report;
- (h) Execute pre-contract discussion by preparing agenda and facilitating negotiations including preparation of minutes of pre-contract discussion meeting; and
- (i) Prepare a draft and final contract agreement.
- (j) Provide any other relevant assistance

2.6. Assist Project Management at All Levels

The consultant shall establish a project management system acceptable to the Client, which will be used to monitor, track and pin point project issues. The works will include, but not limited to the following:

- (a) Review and comment on the Project Implementation Program prepared by the EPC Contractor.
- (b) Review the basic overall project construction schedule, budget and cash disbursement schedule for both foreign and local portion from the EPC Contractor.
- (c) Establish and implement a project management system and procedures to monitor and control the cost and time schedule to enable timely corrective measures.
- (d) Review, comment on and approve the engineering design including vendor/supplier drawings by and from the EPC Contractor in consultation with the Client.

The design review rounds should be limited to two weeks and the total duration for review period should not be more than three weeks in order to expedite the Project.

The approval should not be unreasonably withheld or delayed.



- (e) Support, co-coordinate, supervise, and make decisions and issue instructions for all design and engineering related to the construction activities to the Client view point of ensuring the engineering standards, quality assurance and safety of the Project.
 - (f) Set up a quality reporting system to prepare quality report of project progress (financial and physical) for Client, Development Partner, Power Division, Finance Division, Economic Relation Division, Planning Commission and any other entity of government of Bangladesh.
 - (g) Assist Project Director (PD) for leasing the Development Partner, Power Division, Finance Division, Economic Relation Division, Planning Commission and any other entity of government of Bangladesh.
 - (h) Prepare different letter and document for the project in close consultation with client for assisting the project director.
 - (i) Manage properly claims of contractor against Client within reasonable minimum time considering the best interest of the Client.
 - (j) Anticipate and identify potential difficulties or conflicts and their effect on the implementation schedule and recommended and agree steps to be taken by the contractor or recommending steps to be taken by the Client to overcome the difficulties and to avoid delays.
 - (k) Prepare and/or evaluate recommendations to the Client regarding any change proposals, technical amendments and change in the scope of work, if any, the appropriateness of their pricing and if agreed by the Client the timely issuance to the contractor of charged order, as per the conditions of the EPC Contract.
- Any review or recommendations in the time period of project regarding technical, financial and legal issues should not be more than two weeks in order to expedite the Project.
- (l) Organize various types of meetings during the EPC execution, such as Project Kick-off Meeting, Monthly Progress Meeting, Design Review Meeting, Weekly Meeting etc. and prepare meeting minutes.
 - (m) Review the Payment Application from EPC Contractor and Preparation the Payment Certificate thereafter.
 - (n) Any other relevant assistance

2.7. Inspection, Testing & Commissioning Supervision and Delivery Control during Manufacturing

The consultant with the Client's participation shall undertake to implement, but not limited to the following:



- (a) Review and approve proposals/ document regarding quality assurance, quality control plans and the delivery schedule prepared by the Contractor. Regular review of the production and delivery schedule by the Contractor.
- (b) Review and approve factory Testing & Commissioning Supervision procedures and factory test results submitted by the Contractor.
- (c) Monitor manufacturing progress, and conducting Testing & Commissioning Supervision by regular inspections to ensure compliance with contract documents.
- (d) Observe factory test for major equipment and preparing corresponding certificates (items and tests to be witnessed are to be agreed between the Client and the Contractor). The consultant shall keep a provision in the tender document that EPC contractor will bear all the expenses related to inspection, Testing & Commissioning Supervision and delivery control during manufacturing as per provision of EPC Contract.
- (e) Review inspection reports on each factory inspection submitted by the Contractor.
- (f) Provide any other relevant assistance.

2.8. Construction Supervision and Certification

The Consultant shall:

- (a) Act as the Employer's Representative as per defined under FIDIC Silver book 1999 Edition to execute construction supervision and contract administration services in accordance with the power and authority to be delegated by the Client;
- (b) Issue the commencement order to the Contractor;
- (c) Provide recommendation to the Client for contract matters;
- (d) Check and approve the Contractor's quality assurance and control program;
- (e) Review and approve the proposals submitted by the contractors which shall include but not limited to work program, method statements, material sources, manpower and equipment deployment. The Consultant shall pay attention, in particular, to whether such proposals will meet the safety requirements set forth in the applicable laws and regulations, the specifications or other parts of the contract;
- (f) Provide necessary interpretation to the Client's project manager on technical and commercial issues;
- (g) Explain and/or adjust ambiguities and/or discrepancies in the Contract Documents and issue any necessary clarifications or instructions;
- (h) Review and approve the design of the works, the Contractors' working drawings;



- (i) Carry out field inspections on the contractor's setting out to ensure that the works are carried out in accordance with drawings and other design details;
- (j) Regularly monitor physical and financial progress against the milestones as per the EPC Contract so as to ensure completion of contract in time;
- (k) Supervise the all works related to the 100 MW Solar Power Plant so that all the contractual requirements will be met by the contractors, including those in relation to i) quality of the works, ii) safety and iii) protection of the environment Department of Environment (DoE), EIA Guide line.

The Consultant shall confirm that an accident prevention officer/ Safety Officer proposed by contractor is duly assigned at the Project site and that construction works are carried out according to the requirements set forth in the applicable laws and regulations, the specifications or other parts of the contract ;

- (l) Supervise field tests, sampling and laboratory test to be carried out by the contractors;
- (m) Review the construction method, inspect equipment to be used and workmanship at the site, and attend shop inspection and manufacturing tests;
- (n) Survey and measure the work output performed by the contractors and issue payment certificates such as interim payment certificates and final payment certificate as specified in the contract;
- (o) Coordinate the works among different contractors employed for the Project, if any;
- (p) Issue instructions to EPC Contractor to modify the designs, technical specifications and drawings, relevant calculations as may be necessary in accordance with the actual site conditions;
- (q) Issue change/variation orders and update the cost estimate of the EPC Contract, if any;
- (r) Carry out timely reporting to the Client for any inconsistency in executing the works and suggesting appropriate corrective measures to be applied;
- (s) Inspect, verify and determine claims issued by the parties to the contract (i.e. the Client and contractors) in accordance with the EPC Contract;
- (t) Inspect works and prepare certificates such as Provisional and Final Taking-Over Certificate as specified in the contract;
- (u) Supervise pre-commissioning and commissioning;
- (v) Supervise and confirm that the Punch List is resolved properly by the EPC Contractor and provide periodic and/or continuous inspection during defects liability period and if any defects are noted, instruct the contractor to rectify;



- (w) Check and certify as-built drawings for the work designed by the contractors;
- (x) Supervise Environment, Health and Safety (EHS) construction based on World Bank guideline or Bangladesh's regulations.
- (y) Full Time Supervision and Monitoring of construction work from the beginning to the end of the construction;
- (z) Supervision of power evacuation EPC works of 50 kM (Approx.) 132 KV double circuit overhead transmission line and hooking up from proposed Solar Power Plant to 132/33kV Ghatail grid substation at Tangail District of Bangladesh;
- (aa) Coordinate proper operation and maintenance procedures based on the operation and maintenance manuals submitted by the contractor; and
- (bb) Prepare and submit a series of reports, such as Monthly Progress Report, QA/QC Report, Testing & Commissioning Supervision & Commissioning Report, Project Completion Report etc. to the Client;
- (cc) Assisting all Concerned Agencies to ensure proper and timely completion of the Civil works, Electrical, I & C, Mechanical Works as well as smooth Commissioning of the Plan
- (dd) Provide any other relevant assistance.

2.9. Supervision of land filling, land development, Construction of Embankment and Protection.

- (a) Study of the site including spot level survey (coarse level contour survey), Geo-technical Survey, Topographic survey, Map setting, map referencing, earth/sand volume estimate, area estimation, map digitizing, boundary survey etc. and recommendation on layout of the proposed components including sub-soil investigations necessary for foundation design for land development and Embankment;
- (b) Preparation of details design & drawing, schedule with specification, BoQ of boundary wall, drainage system and fencing ;
- (c) Soil Test;
- (d) Design, estimate (including contour map) and Preparation of specification, BoQ, Tender documents for the land Development, Embankment and Protection;
- (e) Checking & certifying the progress & final Bill submitted by Contractor for payment after execution the work;
- (f) Brief progress report preparation & submit in every month;
- (g) Any other services related to the works;

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2.10. Commissioning and Acceptance Test Review & Supervision

Prior to Commercial Operation of the Project, a series of tests should be carried out and satisfied according to the EPC Contract. The Consultant will be responsible for confirming that all the procedures taken and the tests results are conforming the EPC Contract and thus, the power plant is capable of safe and reliable operation in accordance with the applicable permits and specified operational requirements.

The Consultant should undertake the following related tasks including, but not limited to:

- (a) Review/comment on procedures for pre-commissioning, Testing & Commissioning Supervision and commissioning, Acceptance Test submitted by EPC Contractor;
- (b) Confirm readiness of systems and equipment prior to Testing & Commissioning Supervision and commissioning.
- (c) Advise if observed technical support that is provided by the Contractor's commissioning support personnel is inadequate.
- (d) Review the startup of all systems and equipment according to good industry practices.
- (e) Review the Contractor's commissioning activities, including temporary facilities removal and cleanup.
- (f) Confirm that the required commissioning records and documentation are prepared, distributed, reviewed for comments, and accepted.
- (g) Confirm that all dry test runs/checks, where required, have been carried out and duly witnessed by the Consultant and the Client.
- (h) Witness and review all performance tests, reliability runs, etc., and recommend approval to Client.
- (i) Any other necessary services to complete the Commissioning and Acceptance Test according to the EPC Contract.
- (j) Prepare the Provisional Taking-over Certificate once Commissioning and Acceptance Test is completed and all the requirements specified in EPC Contract have been fully fulfilled.



2.11. Facilitation of implementation of Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP)

The Consultant shall:

- (a) Update the existing EMP in the Environment Impact Assessment (EIA) as appropriate and incorporate necessary technical inputs;
- (b) Clearly identify environmental responsibilities in the bid documents as explained in the EIA/IEE
- (c) Review the EPC Contractor's Environmental Program to be prepared in accordance with EMP, relevant plans and to make recommendations;
- (d) Assist EPC Contractor to implement the measures identified in the EMP and the Environmental Program;
- (e) Monitor the effectiveness of EMP and negative impacts on environment caused by the construction works and provide technical advice, including a feasible solution, so that the situation can be improved when necessary;
- (f) Monitor the EPC Contractor's compliance with conditions stated in the EPC Contract and the requirements under EMP;
- (g) Assist the Client in preparation of the answer to the request from Financial Agencies advisory committee for environmental and social considerations if required and necessary
- (h) Assist the Client in capacity building of the Client staff on environmental management through on-the-job training on environmental assessment techniques, mitigation measure planning, supervision and monitoring, and reporting.
- (i) Provide any other relevant assistance

2.12. Technology Transfer

The Consultant shall transfer the technology during designing and construction supervision. The Consultant shall provide the opportunity to the Client officers and staffs to be involved in the working team of the Consultant during the design, contract administration and supervision works for their capacity building wherever possible. If requested by the Client, the Consultant shall brief and demonstrate the survey and design procedure, the construction supervision and contract management process and procedures. The consultant shall provide 960 Man-days training on "Project Formulation, Implementation, Monitoring and Evaluation (PIME) of solar power plant" of 10 nos. of RPCL's employee and assist the Client in building capacity of its staff as a part of on the job training under the Project.

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The Consultant shall:

- (a) Prepare safety manual in consideration of Bangladesh Labour Act 2006;
- (b) Provide any other relevant assistance.

2.13. Report and Document Preparation

Within the scope of consulting services, the Consultant shall prepare and submit reports and documents as shown tentatively in Table 1. Among those copies, at least one (1) copy of each report should to be submitted to Financing Agency and the remaining copies to RPCL. The Consultant shall provide electronic copy of each of these reports.

The type of reports, timing and number of copies as shown in Table 1 is tentative and minimum requirement only and subject to change according to actual conditions and requirements.

The payment to the Consultant will not be adjusted in the case that extra reports are required by the Client.

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Table 1 : List of submission report			
Category	Type of Report	Timing	No. of Copies
Consultancy Services	Monthly Progress Report	Every month after commencement of the services	8
	Project Completion Report	At the end of Services	10
	Route Survey and Compensation Assessment Report for land, trees, crops, others asset on the route of 132 kV trans-mission line and substations installation	After one Month from the Commence of service	8
Design Review	Design Review Report	Report shall be submitted within 15 (Fifteen) days of every design submittal by the EPC Contractor.	10
Tender Assistance	Tender Document	Within 2 months after commencement of the services	10
	Technical Evaluation and Final Evaluation Report	Within 1 month after closing Bidding	8
	Contract Document	Within 2 month after closing Bidding	8
Construction Supervision	Quarterly Progress Report	Every quarter	8
	Quality Control Report	Every month	8
	Project Cost Control Report	Every month	8
	Claim Report	Every month	8
	Change & Variation Report	Every month	8
	Construction Completion Report (and As-built Drawings, if any)	At the end of the Project	8
	Performance report	At the end of the defect liability period	10
Training	Operation and Maintenance Manual Review	Soon after completion	5
Environment, Social Safeguard, Quality Control	Environmental and Social Monitoring Report	Every quarter	8
	Environmental and Social Plan	At the end of the services	8
	Project Safety Report	Every month	8
	Factory Inspection Report	Every inspection	5
	Site Sampling and Testing & Commissioning Supervision Report	As required or upon request	As required
Other	Technical Report	As required or upon request	As required

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2.14. Responsibilities of the Client

The consultant shall work under the direct supervision of the Client. The concerned offices of RPCL shall assist the Consultant as required in case of any unforeseen events, be it in terms of physical or social obstacles at field levels; the concerned field offices of the RPCL will take initiatives to solve it and ensure good working environment.

2.15. Responsibilities of the Consultant

The Consultant shall carry out the service as detailed in the "Term of Reference" in the best interest of the Client for the successful realization of the project with all reasonable care, skill sound engineering, administrative and financial practices and shall be responsible to the Client (RURAL POWER COMPANY LIMITED) for discharge of responsibilities. During the defect liability period or warranty period (For 26 Month), the consultant will ensure that one expert will monitor the project activities or plant operation activities for seven days of a Month. The expert who work in defect liability period or warranty period, he will prepare the punch list and assist client to resolve the punch list for issuing Final Acceptance Certificate of the project to the EPC.

2.16. Staffing

Position and Estimated Man-Months

Total estimated consulting input is 138 Man-Months as the following tables.

SN	Position	Number of Persons	Months	Estimated Man-Months
1	Solar Power Plant Expert (Team Leader)	1	36	36
2	Mechanical Engineer (Power Plant Expert)	1	3	3
3	Mechanical Engineer (Substation & Transmission line Expert)	1	4	4
4	Electrical Engineer (BoP and Substation Expert)	1	6	6
5	Electrical Engineer (Transmission line Expert)	1	12	12
6	Protection, I&C Expert	1	2	2
7	Civil Engineer	1	28	28
8	Civil Engineer (Transmission line Expert)	1	10	10
9	Geotechnical Specialist	1	4	4
10	Structural Engineer	1	3	3
11	Solar PV Specialist	1	12	12
12	Environmental Specialist	1	5	5
13	Social safe guard Specialist	1	4	4
14	Procurement cum Contract Specialist	1	6	6
15	Auto CAD Operator	1	3	3
Total		15	138	138



The assumed services for Project are provided by both international and local consultants, which would include, but not be limited to, in the following lists.

The following lists provide a baseline to the Bidders to prepare their offers based on man-months. The Bidders may propose other experts and supporting staffs required to accomplish the tasks outlined in this ToR. It is the Consultant's responsibility to select the optimum team and to propose the professionals which he believes best meets the needs of the Client, which as a result will lead to an update of the lists.

2.17. Qualification of Members

The minimum qualification of all required Team Members is shown below. It is to be noted minimum qualification of Bachelor Degree as stated below means Graduation Degree from a University or an equivalent institution.

Sl No.	Designation	Item of Minimum Qualification
1.	Solar Power Plant Expert (Team Leader)	<p><u>Education:</u></p> <ul style="list-style-type: none"> Bachelor Degree in Electrical/Mechanical Engineering or other relevant. <p><u>Experience:</u></p> <ul style="list-style-type: none"> Overall experience in power plant projects: Minimum 20 years. Experience in solar power plant projects which capacity not less than 5 MW: Minimum 1 projects. Experience of leading a consultants' team as Project Manager/ Team leader in power plant projects: Minimum 1 project.
2.	Mechanical Engineer (Power Plant Expert)	<p><u>Education:</u></p> <ul style="list-style-type: none"> Bachelor Degree in Mechanical Engineering. <p><u>Experience:</u></p> <ul style="list-style-type: none"> Experience as a Mechanical Engineer in project as a consultant: Minimum 10 years. Experience of design/supervision of installation works as a consultant for solar power plant projects as a consultant which capacity not less than 5 MW: Minimum 1 project.
3.	Mechanical Engineer (Substation & Transmission line Expert)	<p><u>Education:</u></p> <ul style="list-style-type: none"> Bachelor Degree in Mechanical Engineering. <p><u>Experience:</u></p> <ul style="list-style-type: none"> Experience as a Mechanical Engineer in project as a consultant: Minimum 10 years. Experience of design/supervision of installation works as a consultant for 132/33kV, 50 MVA grid substations: Minimum 1 project. Experience of design/supervision of installation works as a consultant for 132 kV 20 kM transmission line: Minimum 1

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Sl No.	Designation	Item of Minimum Qualification
		project.
4.	Electrical Engineer (BoP and Substation Expert)	<p><u>Education:</u></p> <ul style="list-style-type: none"> Bachelor Degree in Electrical Engineering. <p><u>Experience:</u></p> <ul style="list-style-type: none"> Experience in power plant projects as a consultant: Minimum 10 years. Experience of design/supervision of installation works as a consultant for grid tide solar power plant projects which capacity not less than 5 MW: Minimum 1 project. Experience of design/supervision of installation works as a consultant for 132/33kV, 50 MVA grid substations: Minimum 1 project.
5.	Electrical Engineer (Transmission line Expert)	<p><u>Education:</u></p> <ul style="list-style-type: none"> Bachelor Degree of Electrical Engineering. <p><u>Experience:</u></p> <ul style="list-style-type: none"> Experience as an Electrical Engineer in the Grid Substation and transmission line as a consultant: Minimum 10 years. Experience of design or supervision of installation works as a consultant for 132/33kV, 50 MVA grid substations: Minimum 1 project. Experience of design or supervision of installation works as a consultant for 132/230/400 kV 20 kM double circuit transmission line: Minimum 1 project.
6.	Protection, I&C Expert	<p><u>Education:</u></p> <ul style="list-style-type: none"> Bachelor Degree in Electrical & Electronic Engineering <p><u>Experience:</u></p> <ul style="list-style-type: none"> Experience in relevant field as a consultant: Minimum 10 years. Experience of design/supervision of installation works as a consultant for power plant projects as I&C Engineer: Minimum 1 project.
7.	Civil Engineer	<p><u>Education:</u></p> <ul style="list-style-type: none"> Bachelor Degree in Civil Engineering. <p><u>Experience:</u></p> <ul style="list-style-type: none"> Experience as civil engineer in projects as a consultant: Minimum 15 years. Experience of design & supervision of embankment construction as a consultant: Minimum 1 project. Experience in supervision of land development as a consultant: Minimum 1 project. Experience in design / supervision for building construction works as a consultant: Minimum 1 project.



Sl No.	Designation	Item of Minimum Qualification
8.	Civil Engineer (Transmission line Expert)	<p><u>Education:</u></p> <ul style="list-style-type: none"> Bachelor Degree in Civil Engineering. <p><u>Experience:</u></p> <ul style="list-style-type: none"> Experience as civil engineer in projects as a consultant: Minimum 10 years. Experience of design/supervision of installation works as a consultant for 132/230/400 kV transmission line construction projects which length not less than 10 km transmission line: Minimum 1 project.
9.	Geotechnical Specialist	<p><u>Education:</u></p> <ul style="list-style-type: none"> Bachelor Degree in Geo technology/ Civil Engineering. <p><u>Experience:</u></p> <ul style="list-style-type: none"> Experience as Geotechnical specialist as a consultant: Minimum 10 years. Experience of design/supervision of installation works as a consultant for power plant projects: Minimum 1 project.
10.	Structural Engineer	<p><u>Education:</u></p> <ul style="list-style-type: none"> Bachelor Degree of Civil/structural Engineering. <p><u>Experience:</u></p> <ul style="list-style-type: none"> Experience as Structural Engineer as consultant: Minimum 10 years. Experience of design/supervision of installation works as a consultant for power plant projects: Minimum 1 project.
11.	Solar PV Specialist	<p><u>Education:</u></p> <ul style="list-style-type: none"> Bachelor Degree in Electrical Engineering/Renewable Engineering. <p><u>Experience:</u></p> <ul style="list-style-type: none"> Experience in solar power plant projects as a consultant: Minimum 10 years. Experience in design / supervision of installation works as a consultant for solar power plant projects which capacity not less than 5 MW: Minimum 1 project.
12.	Environmental Specialist	<p><u>Education:</u></p> <ul style="list-style-type: none"> Bachelor Degree in Environmental Science or other relevant. <p><u>Experience:</u></p> <ul style="list-style-type: none"> Experience in related fields as a consultant: Minimum 10 years. Experience as Environmental specialist for power plant project: Minimum 1 project.
13.	Social safe guard Specialist	<p><u>Education:</u></p> <ul style="list-style-type: none"> Bachelor Degree in Social Science or other relevant. <p><u>Experience:</u></p>

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Sl No.	Designation	Item of Minimum Qualification
		<ul style="list-style-type: none"> • Experience in related fields as a consultant: Minimum 10 years. • Experience as safeguard specialist: Minimum 1 project.
14.	Procurement cum Contract Specialist	<p><u>Education:</u></p> <ul style="list-style-type: none"> • Bachelor Degree in Mechanical/Electrical Engineering, /Law/Commerce/Business Administration or other relevant. • Training in PPA 2006 and PPR 2008 of Bangladesh: Minimum 1 month. <p><u>Experience:</u></p> <ul style="list-style-type: none"> • Experience in related fields as a consultant: Minimum 15 years. • Experience in working in power plant construction project as a contract expert: Minimum 1 project. • Experience in working in power plant construction project as a procurement expert: Minimum 1 project.
15.	Auto CAD and GIS specialist	<p><u>Education:</u></p> <ul style="list-style-type: none"> • Bachelor Degree in relevant subject. <p><u>Experience:</u></p> <ul style="list-style-type: none"> • Experience in the field of GIS and Auto CAD design: Minimum 10 years. • Extensive experience is required with Auto-CAD, ARC/INFO, and Arc View software. • Experience in design, drawing of power project: Minimum 1 project.

2.18. Responsibilities of different Experts:

Responsibilities of the professional staff for the Service should be as follows:

(1) Solar Power Plant Expert (Team Leader):

His/her tasks and responsibilities shall include but not limited to

- i. Oversee the assignment of the consultant team, and act as the team's point of contact with RPCL and other stakeholders;
- ii. Assist Project Director(PD) in all technical, financial, legal, contractual management for smooth project Implementation;
- iii. Review the project management including administration procedures of the Executing Agency (EA) for the implementation of the project and, as appropriate recommend changes and or new procedures in keeping with PPR-2008 and modern international practices;
- iv. Review feasibility study report;
- v. Prepare technical specifications, project implementation schedules, and drawings for bidding documents, bidding documents for the transmission line, solar power plant;



- vi. Review, check and certify supplier's equipment design, and assist RPCL in approving the technical specifications;
- vii. Inspect, Witness and certify of the main equipment of power plant;
- viii. Advise and assist RPCL to develop and maintain a project quality assurance plan, and monitor contractor's designs and works executed in line with the plan and project requirements. As and when referred by RPCL, speedily advise on acceptability of such designs and works, and suggest corrective measures to be undertaken;
- ix. Assist RPCL in supervising the installation, Testing & Commissioning Supervision and commissioning of the main and ancillary equipment, plant and utilities. Monitor project progress against plan, report on progress, and proposed remedial measures as necessary;
- x. Review Method of Statements/Test Procedures.
- xi. Review contractor's claims for extension of time or additional costs; and undertake variation instructions and cost review; certify volume of works completed withdrawal applications and issue of monthly and final payment certificates;
- xii. Assist in management of project activities;
- xiii. Review of hazard evaluation and contractor safety procedure;
- xiv. Review and certification of Testing & Commissioning Supervision and Commissioning Plan;
- xv. Prepare Non Compliance Report (Defective Works);
- xvi. Prepare Preliminary Punch List (List of Incomplete Works);
- xvii. Witnessing Commissioning Guarantee and Acceptance Tests and Issue PAC for Taking Over;
- xviii. Prepare Check List of Materials/Spares to be handled over to the Client by EPC Contractor;
- xix. Prepare Punch List (List of unfulfilled contractual obligations);
- xx. Review of Operation Manuals;
- xxi. Report on findings during the implementation of the power plants;
- xxii. Assist RPCL in ensuring that its personnel receives adequate on-the-job training by the contractor on all relevant aspects of Solar PV power plant so that RPCL's personnel can independently perform the operation and maintenance functions;
- xxiii. Deliver the required reports including final reports;
- xxiv. Prepare and submit Final Project Completion Report (PCR);
- xxv. Attend meetings with the client as and when required
- xxvi. Prepare meeting minutes and submit to the project director;
- xxvii. Prepare letter for any project management issue and
- xxviii. Conduct other duties and responsibilities as required by the TOR.

(2). Mechanical Engineer (Power Plant Expert)

His/her tasks and responsibilities shall include but not limited to

- i. Assist in prepare and review technical specifications, BoQ, project implementation schedules, drawings for bidding document and tender document for the power plant;

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- ii. Review, check and certify supplier's equipment design, and assist RPCL in finalizing the technical specifications & drawings;
- iii. Assist RPCL in supervising the installation, Testing & Commissioning of the main and ancillary equipment, power plant and utilities.
- iv. Monitor project progress against plan, report on progress, and proposed remedial measures as necessary;
- v. Shall maintain liaison with the sponsor, Team leader and other concerned agencies;
- vi. Guide and co-ordinate all project activities
- vii. Review Method of Statements/Test Procedures.
- viii. Review and certification of Testing & Commissioning Supervision and Commissioning Plan;
- ix. Prepare Non Compliance Report (Defective Works);
- x. Prepare Preliminary Punch List (List of Incomplete Works);
- xi. Witnessing Commissioning Guarantee and Acceptance Tests and Issue PAC for Taking Over;
- xii. Assist Team Leader in preparation of Check List of Materials/Spares to be handled over to the Client by EPC Contractor;
- xiii. Assist Team Leader in preparation of Punch List (List of unfulfilled contractual obligations);
- xiv. Assist Team Leader in Review of Operation Manuals;
- xv. Assist Team Leader in delivering the required reports including final reports;
- xvi. Assist Team Leader in preparation and submission of Final Project Completion Report (PCR);
- xvii. Attend meetings with the client as and when required and
- xviii. Conduct other duties and responsibilities as required by the TOR.

(3). Mechanical Engineer (Substation & Transmission line Expert)

His/her tasks and responsibilities shall include but not limited to

- i. Assist in prepare and review technical specifications, BoQ, project implementation schedules, drawings for bidding document and tender document for the 132/33 kV substation & 132 kV Transmission line;
- ii. Review, check and certify supplier's equipment design, and assist RPCL in finalizing the technical specifications & drawings;
- iii. Assist RPCL in supervising the installation, Testing & Commissioning of the main and ancillary equipment of 132/33 kV substation & 132 kV Transmission line;
- iv. Monitor work progress against plan, report on progress, and proposed remedial measures as necessary;
- v. Shall maintain liaison with the sponsor, Team leader and other concerned agencies;
- vi. Guide and co-ordinate all project activities
- vii. Review Method of Statements/Test Procedures.
- viii. Review and certification of Testing & Commissioning Supervision and Commissioning Plan;
- ix. Prepare Non Compliance Report (Defective Works);



- x. Prepare Preliminary Punch List (List of Incomplete Works);
- xi. Witnessing Commissioning Guarantee and Acceptance Tests and Issue PAC for Taking Over;
- xii. Assist Team Leader in preparation of Check List of Materials/Spares to be handled over to the Client by EPC Contractor;
- xiii. Assist Team Leader in preparation of Punch List (List of unfulfilled contractual obligations);
- xiv. Assist Team Leader in Review of Operation Manuals;
- xv. Assist Team Leader in delivering the required reports including final reports;
- xvi. Assist Team Leader in preparation and submission of Final Project Completion Report (PCR);
- xvii. Attend meetings with the client as and when required and
- xviii. Conduct other duties and responsibilities as required by the TOR.

(4) Mechanical Engineer (Substation & Transmission line Expert)

His/her tasks and responsibilities shall include but not limited to

- i. Assist in prepare and review technical specifications, BoQ, project implementation schedules, drawings for bidding document and tender document for the 132/33 kV substation, 0.4kV and 33 kV switchyard and distribution network , control system, Solar PV system and Inverter system;
- ii. Review, check and certify supplier's equipment design, and assist RPCL in finalizing the technical specifications & drawings;
- iii. Assist RPCL in supervising the installation, Testing & Commissioning of the main and ancillary equipment of 132/33 kV substation, 0.4kV and 33 kV switchyard and distribution network , control system, Solar PV system and Inverter system;
- iv. Monitor work progress against plan, report on progress, and proposed remedial measures as necessary;
- v. Provide technical design information to RPCL to enable them to obtain the necessary way leaves and construction permits for the new lines and substations;
- vi. Perform installations work according to internationally recognize code and standard;
- vii. Shall maintain liaison with the sponsor, Team leader and other concerned agencies;
- viii. Guide and co- ordinate all project activities;
- ix. Monitor tests on completion, pre-commissioning and commissioning procedures; provide commissioning assistance; and monitor rectification of detail and outstanding works for issue PAC for taking-over ;
- x. Prepare Non Compliance Report (Defective Works);
- xi. Prepare Preliminary Punch List (List of Incomplete Works);
- xii. Prepare Check List of Materials / Spares to be handed over to the Client by EPC Contractor;
- xiii. Prepare Punch List (List of unfulfilled contractual obligations);
- xiv. Assist in training of RPCL staff through on-the-job training and classroom training programs, covering the installation techniques required for high voltage lines, low voltage connections, high voltage switchgear installation and in associated maintenance and repair procedures;

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- xv. Assist Team Leader in preparation and submission of Final Project Completion Report;
- xvi. Attend meetings with the client as and when required and
- xvii. Perform other functions as may be assigned or delegated by Team Leader from time to time during the tenure of assignment and as required by the TOR.

(5) Electrical Engineer (Transmission line Expert)

His/her tasks and responsibilities shall include but not limited to

- i. Assist in prepare and review technical specifications, BoQ, project implementation schedules, drawings for bidding document and tender document for the 33 kV distribution network and 132 kV Transmission line;
- ii. Review, check and certify supplier's equipment design, and assist RPCL in finalizing the technical specifications & drawings;
- iii. Assist RPCL in supervising the installation, Testing & Commissioning of the main and ancillary equipment of 33 kV distribution network and 132 kV Transmission line and 33 kV switchyard;
- iv. Monitor work progress against plan, report on progress, and proposed remedial measures as necessary;
- v. Provide technical design information to RPCL to enable them to obtain the necessary way leaves and construction permits for the new lines and substations;
- vi. Perform installations work according to internationally recognize code and standard;
- vii. Perform route survey of 132 kV Transmission line
- viii. Shall maintain liaison with the sponsor, Team leader and other concerned agencies;
- ix. Guide and co-ordinate all project activities;
- x. Monitor tests on completion, pre-commissioning and commissioning procedures; provide commissioning assistance; and monitor rectification of detail and outstanding works for issue PAC for taking-over ;
- xi. Prepare Non Compliance Report (Defective Works);
- xii. Prepare Preliminary Punch List (List of Incomplete Works);
- xiii. Prepare Check List of Materials / Spares to be handed over to the Client by EPC Contractor;
- xiv. Prepare Punch List (List of unfulfilled contractual obligations);
- xv. Assist Team Leader in preparation and submission of Final Project Completion Report;
- xvi. Attend meetings with the client as and when required and
- xvii. Perform other functions as may be assigned or delegated by Team Leader from time to time during the tenure of assignment and as required by the TOR.

(6) Protection, I&C Expert

His/her tasks and responsibilities shall include but not limited to

- i. Review and prepare protection skim of transmission and distribution network and control system, Solar PV system;



- ii. Carry out the testing and commissioning of 132/33 kV substation, 0.4kV and 33 kV switchyard and distribution network , control system, Solar PV system and Inverter system and 132 kV Transmission line ;
- iii. Perform testing and commissioning according to PGCB Grid code, internationally recognize code and standard;
- iv. Shall maintain liaison with the sponsor, Team leader and other concerned agencies;
- v. Guide and co- ordinate all project activities;
- vi. Prepare Non Compliance Report (Defective Works);
- vii. Prepare Preliminary Punch List (List of Incomplete Works);
- viii. Prepare Check List of Materials / Spares to be handed over to the Client by EPC Contractor;
- ix. Prepare Punch List (List of unfulfilled contractual obligations);
- x. Assist in training of RPCL staff through on-the-job training and classroom training programs, covering the installation techniques required for high voltage lines, low voltage connections, high voltage switchgear installation and in associated maintenance and repair procedures;
- xi. Assist Team Leader in preparation and submission of Final Project Completion Report;
- xii. Attend meetings with the client as and when required and
- xiii. Perform other functions as may be assigned or delegated by Team Leader from time to time during the tenure of assignment and as required by the TOR.

(7) Civil Engineer

His/her tasks and responsibilities shall include but not limited to

- i. Assist in prepare technical specifications, BoQ, project implementation schedules, drawings for bidding document for the land development, embankment construction, dormitory and office building and Guest House construction, Ansar Barack, workshop & warehouse construction, boundary wall and internal & external road construction, drainage system, fire fighting system, solar panel cleaning system and others civil construction works of the power plants;
- ii. Assist in prepare and review tender document for the land development, embankment construction;
- iii. Assist RPCL to review, check , finalizing and certify supplier's design & drawings, and technical specifications;
- iv. Monitor work progress against plan, report on progress, and proposed remedial measures as necessary;
- v. Perform work supervision land development, embankment, and civil construction works of power plant according to national & internationally recognize code and standard;
- vi. Review and prepare the project civil work design, identify key technical challenges and risks, and prepare remedial measures;
- vii. Shall maintain liaison with the sponsor, Team leader and other concerned agencies;
- viii. Guide and co- ordinate all project activities and Prepare Non Compliance Report (Defective Works);

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- ix. Prepare Preliminary Punch List (List of Incomplete Works);
- x. Prepare Punch List (List of unfulfilled contractual obligations);
- xi. Assist in Preparation and Submission of Final Project Completion Report;
- xii. Attend meetings with the client as and when required and
- xiii. Perform other functions as may be assigned or delegated by Team Leader from time to time during the tenure of assignment and as required by the TOR.

(8) Civil Engineer (Transmission line Expert)

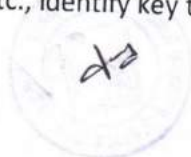
His/her tasks and responsibilities shall include but not limited to

- i. Assist in prepare and review technical specifications, BoQ, project implementation schedules, drawings for bidding document and tender document for the 33 kV distribution network and 132 kV Transmission line;
- ii. Review, check and certify supplier's equipment design, and assist RPCL in finalizing the technical specifications & drawings;
- iii. Assist RPCL in supervising installation, Testing & Commissioning of the main and ancillary equipment of 33 kV distribution network and 132 kV Transmission line and 33 kV switchyard;
- iv. Monitor work progress against plan, report on progress, and proposed remedial measures as necessary;
- v. Provide technical design information to RPCL to enable them to obtain the necessary way leaves and construction permits for the new lines and substations;
- vi. Perform installations work according to internationally recognize code and standard;
- vii. Shall maintain liaison with the sponsor, Team leader and other concerned agencies;
- viii. Guide and co- ordinate all project activities;
- ix. Perform route survey of 132 kV Transmission line
- x. Monitor tests on completion, pre-commissioning and commissioning procedures; provide commissioning assistance; and monitor rectification of detail and outstanding works for issue PAC for taking-over ;
- xi. Prepare Non Compliance Report (Defective Works);
- xii. Prepare Preliminary Punch List (List of Incomplete Works);
- xiii. Prepare Check List of Materials / Spares to be handed over to the Client by EPC Contractor;
- xiv. Prepare Punch List (List of unfulfilled contractual obligations);
- xv. Assist Team Leader in preparation and submission of Final Project Completion Report;
- xvi. Attend meetings with the client as and when required and

(9) Geotechnical Specialist

His/her tasks and responsibilities shall include but not limited to

- i. Assist to prepare civil work design such as land development, embankment, building construction etc., identify key technical challenges and risks, and prepare remedial measures;



- ii. Monitor and ensure turnkey contractor's work on repair of earthworks, land development, embankment, building construction and general civil works of power Plant;
- iii. Review and prepare geotechnical investigation report; and
- iv. Prepare Non Compliance Report (Defective Works);
- v. Prepare Preliminary Punch List (List of Incomplete Works);
- vi. Prepare Punch List (List of unfulfilled contractual obligations);
- vii. Assist in Preparation and Submission of Final Project Completion Report;
- viii. Attend meetings with the client as and when required and
- ix. Perform other functions as may be assigned or delegated by Team Leader from time to time during the tenure of assignment and as required by the TOR.

(10) Structural Engineer

His/her tasks and responsibilities shall include but not limited to

- i. Assist to prepare the Project civil/structural work design for solar power plant, identify key technical challenges and risks, and prepare remedial measures;
- ii. Monitor and ensure turnkey contractor's work on embankment and general civil/structural works of power Plant;
- iii. Identify all technical requirements/parameters to be specified by RPCL required for the embankment construction, dormitory and office building and Guest House construction, Ansar Barack, workshop & warehouse construction, boundary wall and internal & external road construction and others civil construction works of the power plants
- iv. Preparation of required specifications for the work of embankment construction, dormitory and office building and Guest House construction, Ansar Barack, workshop & warehouse construction, boundary wall and internal & external road construction and others civil construction works of the power plants;
- v. Preparation of BoQ cost estimates;
- vi. Prepare specifications for the design of mounting structure of solar power plant shall comply with the appropriate industrial standards and shall be capable of withstanding on-site loading and climatic condition;
- vii. Review, check and certify supplier's equipment structure design, and assist RPCL in approving the technical specifications;
- viii. Shall maintain liaison with the sponsor, Team leader and other concerned agencies;
- ix. Guide and co-ordinate all project activities;
- x. Perform installations work according to internationally recognize code and standard; and
- xi. Prepare Non Compliance Report (Defective Works);
- xii. Prepare Preliminary Punch List (List of Incomplete Works);
- xiii. Prepare Punch List (List of unfulfilled contractual obligations);
- xiv. Assist in Preparation and Submission of Final Project Completion Report;
- xv. Attend meetings with the client as and when required and

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xvi. Perform other functions as may be assigned or delegated by Team Leader from time to time during the tenure of assignment and as required by the TOR.

(11) Solar PV Specialist

His/her tasks and responsibilities shall include but not limited to

- i. Review and prepare the design work on the low voltage DC network, control and protection of Solar PV system & inverter;
- ii. Finalize system design and technical requirements with RPCL such as equipment ratings, type of equipment to be used, areas to be supplied, spares required, and maintenance requirements;
- iii. Provide technical design information to RPCL;
- iv. Perform installations work according to internationally recognize code and standard;
- v. Prepare specifications for equipment and services required for the low voltage DC network, control and protection of Solar PV system & inverter;
- vi. Shall maintain liaison with the sponsor, Team leader and other concerned agencies;
- vii. Guide and co-ordinate all project activities;
- viii. Monitor tests on completion, pre-commissioning and commissioning procedures; provide commissioning assistance; and monitor rectification of detail and outstanding works for issue PAC for taking-over;
- ix. Prepare Non Compliance Report (Defective Works);
- x. Prepare Preliminary Punch List (List of Incomplete Works);
- xi. Prepare Check List of Materials / Spares to be handed over to the Client by EPC Contractor;
- xii. Prepare Punch List (List of unfulfilled contractual obligations);
- xiii. Assist in training of RPCL staff through on-the-job training and classroom training programs, covering the installation techniques required for low voltage connections, low voltage switchgear installation and in associated maintenance and repair procedures;
- xiv. Assist Team Leader in preparation and submission of Final Project Completion Report;
- xv. Attend meetings with the client as and when required and
- xvi. Perform other functions as may be assigned or delegated by Team Leader from time to time during the tenure of assignment and as required by the TOR.

(12) Environmental Specialist

His/her tasks and responsibilities shall include but not limited to

- i. Undertake a cumulative assessment of the potential environmental impact of the Project, including consultation with groups to be affected by the Project;
- ii. Update the environmental management and monitoring plan (EMP) detailing environmental mitigation measures to address each identified impact, and recommend appropriate environmental mitigation measures;



- iii. Assess the cost, responsibilities, schedule, location, and monitoring framework associated with the implementation of the mitigation measures and the EMP;
- iv. Shall maintain liaison with the sponsor, donor and other concerned agencies;
- v. Guide and co-ordinate all project activities;
- vi. Interpret the environmental consequences of Land Development, Embankment Construction and Protection work of embankment;
- vii. Assess environmental impacts and mitigation measures;
- viii. Prepare Punch List (List of unfulfilled contractual obligations);
- ix. Assist in Preparation of Final Project Completion Report; and
- x. Attend meetings with the client as and when required
- xi. Perform other functions as may be assigned or delegated by Team Leader from time to time during the tenure of assignment and as required by the TOR.

(13) Social safe guard Specialist:

His/her tasks and responsibilities shall include but not limited to:

- i. Designing and developing methodology along with collection, compilation and analysis of data related to social and economic activities along the route;
- ii. Establishing baseline condition from socio- economic point of view;
- iii. Identifying and assessing the possible positive and negative impacts in settlements and homesteads due to installation of solar power plant;
- iv. Preparing and conduct consultation meetings with stakeholders and participate in workshops;
- v. Recommending measures to offset negative impacts and will assist team leader in preparing Environmental Management Plan as well as in preparing the EIA &SIA report;
- vi. Examining and evaluating activities of the field researchers;
- vii. Examining the development of conflicts among the different groups and different localities and provide mitigation measures during the process of implementing the power plant;
- viii. Attend meetings with the client as and when required and
- ix. Evaluating the overall social benefits like in poverty alleviation, women participation, health.

(14) Procurement cum Contract Specialist

His/her tasks and responsibilities shall include but not limited to:

- i. Provide support to BEC/ PEC/ TEC meetings based on the tender;
- ii. Provide assistance on bid analysis in the aspect of legal, financial, contractual, Procurement and others related to the project as required.
- iii. Assist RPCL to ensure the procurement procedure to conform PPA 2006, PPR 2008 and Indian Exim Bank guidelines
- iv. Prepare/review the bidding documents

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- v. Attend meetings with the client as and when required and
- vi. Assist RPCL in evaluation of tenders in: a) preparing, checking and reviewing bid documents, b) conducting pre-bid conference, c) replying bidders' questions, d) examining and reviewing the technical bids received, e) preparing draft evaluation report and selecting technically responsive bidders, f) evaluating financial proposals, g) preparing final evaluation reports with recommendation for award of contract, h) preparing draft contract agreement. e) Assist RPCL in contract negotiation.

(15) Auto CAD and GIS specialist

His/her tasks and responsibilities shall include but not limited to:

- i. Prepare all types of maps and drawings
- ii. Shall have close co- ordination with all other members of the team for preparation of the maps and drawings of the power plant;
- iii. Attend meetings with the client as and when required and
- iv. Others as necessary.

2.19. Others

Safety Control of the Project

In an effort to assure the safety during the construction work of the Project, the Consultant shall take the following actions related to the safety control;

- (a) Ensure that bidding documents cover the following items that:
 - i) The safety requirements in accordance with the laws and regulations in the country of the Borrower and relevant international standards (including guidelines of international organization), if any
 - ii) Bidders shall furnish a safety plan to meet the safety requirements stipulated in the bidding documents.
 - iii) The personnel for key positions to be proposed by bidders shall include an accident prevention officer/ safety officer.
- (b) The consultant shall take following actions to secure the safety in the project:
 - i) The consultants shall review the safety plans submitted by the bidders.
 - ii) During the supervision of the construction work, the consultants shall confirm that an accident prevention officer proposed by the contractor is duly assigned at the project site and that the construction work is carried out according to the safety requirements stipulated in the contract. If consultants recognize any questions regarding the safety measures including the ones mentioned above, the consultants shall require the contractors to take appropriate remedies.

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3.0. Eligibility

Application has been invited from the competent consulting firms who have at least provided Consultancy Services within the last 10 years for–

1. Preparation of Drawing Design of Land Development, Embankment and Supervision of that works
2. Design and Construction Supervision of a Solar PV power plant project with minimum capacity 25 MW in a single contract.
3. Design and Construction Supervision of a 132 kV 10 kM transmission line in a single contract.

Consulting firm may form Joint Venture/Consortium/Association (JVCA). In such case, Lead partner must have experience in the field of consulting services involving preparation of Tender Document, Design Review and Approval, Construction supervision, Testing & Commissioning Supervision within the last 10 years, for at least one (1) Solar PV power plant project with minimum capacity 25 MW. Other partners should have remaining required experience to qualify. Any one Joint Venture/ Consortium/ Association member shall not be allowed to participate with more than one Applicant.

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RURAL POWER COMPANY LIMITED "শেখ হাসিনার উদ্যোগ-
ঘরে ঘরে বিদ্যুৎ"
House No. 19, Road No. 1/B, Sector No. 09, Uttara Model Town
Dhaka-1230, Bangladesh. Email: info@rpcl.gov.bd, Web: www.rpcl.gov.bd

Request for Expression of Interest (Firm)

1	Ministry/Division	Ministry of Power, Energy and Mineral Resources/Power Division
2	Agency	Rural Power Company Limited
3	Procuring Entity Name	Executive Director (Engineering), Rural Power Company Limited
4	Procuring Entity code	Not used at present
5	Procuring Entity District	Dhaka
6	Expression of Interest for Selection of	The Procurement of Consultancy Services for the Project "Construction of 100 MW Solar Power Plant at Madarganj in Jamalpur District", Bangladesh.
7	EOI Ref. No.	PUR-006(MADARGANJ100MW/EOI)/2021-2022, Date: 04/10/2021
8	Date	04/10/2021
KEY INFORMATION		
9	Procurement Method	Quality & Cost Based Selection (QCBS)
10	Budget and Source of Funds	RPCL Own Fund
11	Development Partner (If applicable)	As per approved DPP. EPC Cost of the project will be provided by Exim Bank, India under LoC-III.
PARTICULAR INFORMATION		
12	Project/ Program code	Not applicable
13	Project/ Program name	The Procurement of Consultancy Services for the Project "Construction of 100 MW Solar Power Plant at Madarganj in Jamalpur District", Bangladesh.
14	EOI closing date and time	24/10/2021 at 12:00 Noon
INFORMATION FOR APPLICANT		
15	Brief description of the assignment	<p>The Procurement of Consultancy Services for the Project "Construction of 100 MW Solar Power Plant at Madarganj in Jamalpur District", Bangladesh.</p> <p>The assignment will include the following:</p> <ol style="list-style-type: none"> 1. Review Feasibility Study done by EQMS Consulting Limited, Bangladesh 2. Preparation of Drawing Design, Specifications, Bill of Quantities (BoQ) of Land Development, Embankment, Road Construction work 3. Preparation of Drawing Design, Specifications, Bill of Quantities, EPC Tender Document of 100 MW Solar Power Plant 4. Preparation of Drawing Design, Specifications, Bill of Quantities, EPC Tender Document of 132 kV double circuit transmission line from proposed 100 MW solar power plant to Ghatial grid substation of Power Grid Company of Bangladesh (PGCB). 5. Supervision of 132 kV trans-mission line and substations installation works 6. Preparation of Route Survey and Compensation Assessment Report for land, trees, crops, others asset on the route of 132 kV trans-mission line and substations installation 7. Assistance in Bidding Process 8. Review and Recommendation for Approval of all drawing design submitted by the EPC. 9. Supervision of Land Development, Embankment, Road Construction, Solar Plant Installation & Construction works during Implementation Period 10. Inspection, Testing & Commissioning Supervision of 100 MW Solar Power Plant 11. Assist project management at all levels 12. Certification of contractor's supply, works, service, different inspection, installation and testing activities 13. Review and Certification of acceptance test certificate of all equipment of the power plant 14. Facilitation of implementation of Environmental Management Plan (EMP), Environmental Monitoring Plan (EMoP) 15. Technology transfer 16. Required Report and Document Preparation 17. Others relevant services mentioned in the Terms of Reference (TOR)
16	Experiences, Resources and Delivery capacity required.	<p>Application has been invited from the competent consulting firms who have at least provided Consultancy Services within the last 10 years for-</p> <ol style="list-style-type: none"> 1. Preparation of Drawing Design of Land Development, Embankment and Supervision of that works 2. Design and Construction Supervision of a Solar PV power plant project with minimum capacity 25 MW in a single contract. 3. Design and Construction Supervision of a 132 kV 10 km transmission line in a single contract. <p>Consulting firm may form Joint Venture/Consortium/Association (JVCA). In such case, Lead partner must have experience in the field of consulting services involving preparation of Tender Document, Design Review and Approval, Construction supervision, Testing & Commissioning Supervision within the last 10 years, for at least one (1) Solar PV power plant project with minimum capacity 25 MW. Other partners should have remaining required experience to qualify. Any one Joint Venture/ Consortium/ Association member shall not be allowed to participate with more than one Applicant.</p>
17	Other details (if applicable)	<p>The intending consulting firms should collect the "Detailed Terms of Reference as well as EoI document" from the RPCL office by submitting an application to the Executive Director (Engineering), Rural Power Company Limited, House No.-19, Road No.-1/B, Sector No.-09, Uttara Model Town, Dhaka-1230, Bangladesh during office hours till 21/10/2021. The document is also available in RPCL's website (www.rpcl.gov.bd) for reference only.</p> <p>The EOIs would be reviewed on the basis of the following:</p> <ul style="list-style-type: none"> • Registration and age of Firm • Experience of the firm in similar task • Availability of key professionals • Availability of resources • Managerial strength and financial capacity • Experience of the firm in other works <p>Any application submitted later than the specified time shall not be entertained. A short list of Applicants will be made by evaluating the received applications in accordance with PPR-2008. RFP will be issued to short listed firms.</p>
18	Association with foreign Firm is	Encouraged
19	Place of EOI submission	Rural Power Company Limited, House No.-19, Road No.-1/B, Sector No.-09, Uttara Model Town, Dhaka-1230, Bangladesh.
PROCURING ENTITY DETAILS		
20	Name of official Inviting EOI	Md. Salim Bhuiyan, PEng
21	Designation of official Inviting EOI	Executive Director (Engineering)
22	Address of official Inviting EOI	Rural Power Company Limited, House No.-19, Road No.-1/B, Sector No.-09, Uttara Model Town, Dhaka-1230, Bangladesh.
23	Contact details of official Inviting EOI	Phone: +88-02-48961201, Fax: +88-02-48963229, E-mail: edengg@rpcl.gov.bd, Website: http://www.rpcl.gov.bd
24	Special Instruction	The Procuring Entity reserves the right to accept any or reject any/all applications without assigning any reason.

(Md. Salim Bhuiyan, PEng.)
Executive Director (Engineering)
Rural Power Company Limited



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রেজি-ডিএ ৮৪
৬৮তম বর্ষ
২৭৪তম সংখ্যা
১৯ আশ্বিন ১৪২৮
২৬ সফর ১৪৪৩ হিজরি
৪ অক্টোবর ২০২১



RURAL POWER COMPANY LIMITED

House No. 19, Road No. 1/B, Sector No. 09; Uttara Model Town
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"শেখ হাসিনার উদ্যোগ-
ঘরে ঘরে বিদ্যুৎ"

Request for Expression of Interest (Firm)

1	Ministry/Division	Ministry of Power, Energy and Mineral Resources/Power Division
2	Agency	Rural Power Company Limited
3	Procuring Entity Name	Executive Director (Engineering), Rural Power Company Limited
4	Procuring Entity code	Not used at present
5	Procuring Entity District	Dhaka
6	Expression of Interest for Selection of	The Procurement of Consultancy Services for the Project "Construction of 100 MW Solar Power Plant at Madarganj in Jamalpur District", Bangladesh.
7	BOI Ref. No.	PUR-006(MADARGANJ100MW/BOI)/2021-2022, Date: 04/10/2021
8	Date	04/10/2021
KEY INFORMATION		
9	Procurement Method	Quality & Cost Based Selection (QCBS)
10	Budget and Source of Funds	RPCL Own Fund
11	Development Partner (If applicable)	As per approved DPP. EPC Cost of the project will be provided by Exim Bank, India under LoC-III.
PARTICULAR INFORMATION		
12	Project/ Program code	Not applicable
13	Project/ Program name	The Procurement of Consultancy Services for the Project "Construction of 100-MW Solar Power Plant at Madarganj in Jamalpur District", Bangladesh.
14	EOI closing date and time	24/10/2021 at 12:00 Noon
INFORMATION FOR APPLICANT		
15	Brief description of the assignment	The Procurement of Consultancy Services for the Project "Construction of 100 MW Solar Power Plant at Madarganj in Jamalpur District", Bangladesh. The assignment will include the following: 1. Review Feasibility Study done by EQMS Consulting Limited, Bangladesh 2. Preparation of Drawing Design, Specifications, Bill of Quantities (BoQ) of Land Development, Embankment, Road Construction work 3. Preparation of Drawing Design, Specifications, Bill of Quantities, EPC Tender Document of 100 MW Solar Power Plant 4. Preparation of Drawing Design, Specifications, Bill of Quantities, EPC Tender Document of 132 kV double circuit transmission line from proposed 100 MW solar power plant to Ghatal grid substation of Power Grid Company of Bangladesh (PGCB). 5. Supervision of 132 kV trans-mission line and substations installation works 6. Preparation of Route Survey and Compensation Assessment Report for land, trees, crops, others asset on the route of 132 kV trans-mission line and substations installation 7. Assistance in Bidding Process 8. Review and Recommendation for Approval of all drawing design submitted by the EPC. 9. Supervision of Land Development, Embankment, Road Construction, Solar Plant Installation & Construction works during Implementation Period 10. Inspection, Testing & Commissioning. Supervision of 100 MW Solar Power Plant 11. Assist project management at all levels 12. Certification of contractor's supply, works, service, different inspection, installation and testing activities 13. Review and Certification of acceptance test certificate of all equipment of the power plant 14. Facilitation of implementation of Environmental Management Plan (SMP), Environmental Monitoring Plan (EMoP) 15. Technology transfer 16. Required Report and Document Preparation 17. Others relevant services mentioned in the Terms of Reference (TOR)
16	Experiences, Resources and Delivery capacity required.	Application has been invited from the competent consulting firms who have at least provided Consultancy Services within the last 10 years for- 1. Preparation of Drawing Design of Land Development, Embankment and Supervision of that works 2. Design and Construction Supervision of a Solar PV power plant project with minimum capacity 25 MW in a single contract. 3. Design and Construction Supervision of a 132 kV 10 km transmission line in a single contract. Consulting firm may form Joint Venture/Consortium/Association (JVCA). In such case, Lead partner must have experience in the field of consulting services involving preparation of Tender Document, Design Review and Approval, Construction supervision, Testing & Commissioning Supervision within the last 10 years, for at least one (1) Solar PV power plant project with minimum capacity 25 MW. Other partners should have remaining required experience to qualify. Any one Joint Venture/ Consortium/ Association member shall not be allowed to participate with more than one Applicant.
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19	Place of EOI submission	Rural Power Company Limited, House No.-19, Road No.-1/B, Sector No.-09, Uttara Model Town, Dhaka- 1230, Bangladesh.
PROCURING ENTITY DETAILS		
20	Name of official Inviting EOI	Md. Salim Bhuiyan, PEng
21	Designation of official Inviting EOI	Executive Director (Engineering)
22	Address of official Inviting BOI	Rural Power Company Limited, House No.-19, Road No.-1/B, Sector No.-09, Uttara Model Town, Dhaka- 1230, Bangladesh.
23	Contact details of official Inviting EOI	Phone: +88-02-48961201, Fax: +88-02-48963229, E-mail: edengg@rpcl.gov.bd , Website: http://www.rpcl.gov.bd
24	Special Instruction	The Procuring Entity reserves the right to accept any or reject any/all applications without assigning any reason.

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Rural Power Company Limited

