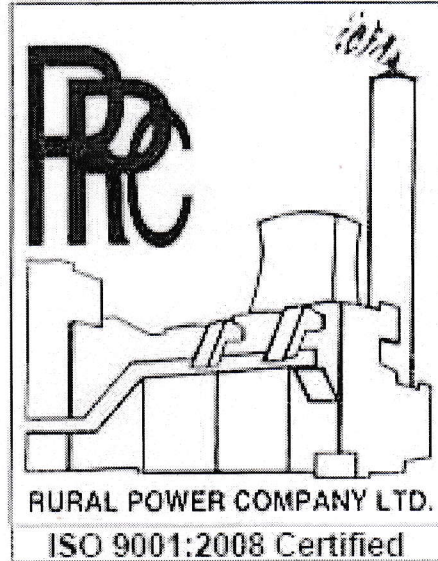


# Rural Power Company Limited

House-19, Road 1/B, Sector 9, Uttara Model Town, Dhaka -1230, Bangladesh.



Terms of Reference (TOR)

For

Selection of Joint Venture Partner for Implementation of Gazaria 50 MW Solar  
Photovoltaic (PV) Power Plant Project on IPP Basis.

EOI REF. NO.: -PUR-019(FS/GAZARIA/OTM)2021-22, Date: 30.03.2022

March, 2022

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## RURAL POWER COMPANY LIMITED

House No. 19, Road No. 1/B, Sector No. 09  
Uttara Model Town, Dhaka- 1230, Bangladesh.  
Email: [info@rpcl.gov.bd](mailto:info@rpcl.gov.bd), Web: [www.rpcl.gov.bd](http://www.rpcl.gov.bd)

“শেখ হাসিনার  
উদ্যোগ  
ঘরে ঘরে বিদ্যুৎ”

### Request for Expression of Interest

1	Ministry/ Division	Ministry of Power, Energy & Mineral Resources/Power Division
2	Agency	Rural Power Company Limited (RPCL)
3	Procuring Entity Name	Executive Director (Engineering), Rural Power Company Limited.
4	Procuring Entity Code	Not Use at Present
5	Procuring Entity District	Dhaka
6	Expressions of Interest for	Selection of Joint Venture (JV) Partner for Implementation of Gazaria 50 MW Solar Photovoltaic (PV) Power Plant Project on IPP Basis
7	EOI Ref. No. and Date	PUR-019(FS/GAZARIA/OTM)2021-22, Date: 30.03.2022
8	Procuring Method	Open Tendering Method (OTM)
9	EOI Closing Date, Time and Place of EOI Proposal Submission	Date:12.05.2022, Time: 12:00 PM, Place: Corporate Office: Rural Power Company Limited (RPCL), House No #19, Road No #1/B, Sector #09, Uttara Model Town, Dhaka-1230, Bangladesh.
10	EOI document available	The intending firms may collect the “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 from 30.03.2022 (from 10:00 AM) to 12.05.2022 (till 12:00 PM). The document is also available in RPCL's website:( <a href="http://www.rpcl.gov.bd">www.rpcl.gov.bd</a> ).
11	Pre-Proposal Meeting Date, Time and Place	Date:12.04.2022, Time: 11:00 hours (BST), Place: RPCL Corporate Office.
12	Brief Description of Assignment	<p>Expression of interest (EOI) is invited to select a Joint Venture Partner from the experienced and reputed Companies/ Organizations for implementation of Gazaria 50 MW Solar PV Power Plant Project at Gazaria Upazila under Munshiganj District. Through this EOI, RPCL intends to identify and select a prospective Joint Venture Partner to enter into a Memorandum of Understanding (subsequently into Joint Venture Agreement) for implementation of Gazaria 50 MW Solar PV Power Plant Project. RPCL and selected partner will submit the Technical and Tariff proposal to Power Division following the relevant guideline. After approval of Tariff and getting LOI from BPDB, RPCL and the selected Joint Venture Partner will establish a Special Purpose Vehicle incorporated through Registrar of Joint Stock Companies &amp; Firms (RJSC) in Bangladesh under Companies Act, 1994.</p> <p>Responsibilities of the Proposed Joint Venture Company shall include development of Gazaria 50 MW Solar PV Power Plant at Gazaria Upazila under Munshiganj District in all respect including:</p> <ol style="list-style-type: none"><li>Arrange the Debt Financing for the Project</li><li>Detailed Feasibility Study including Electrical Interconnection Facility;</li><li>Selection of Owner's Engineer and EPC Contractor;</li><li>Generation, Operation and Maintenance of the Facility;</li><li>Sales of Energy from the Project and</li></ol> <p>Any other works as mutually agreed at the time of finalization of JV Agreement.</p>
13	Eligibility and Qualification Criteria	<p><b>General Eligibility</b></p> <ol style="list-style-type: none"><li>The Applicant should be incorporated legally in any country having diplomatic relationship with Bangladesh.</li><li>No consortium will be allowed.</li></ol> <p><b>Qualification Criteria</b></p> <ol style="list-style-type: none"><li>Applicant, as Solar Power Project Developer, should have experience solely in developing, own and operating at least cumulative 50 MW Grid Connected Solar PV Power Plants within last five (5) years from the last date of submission of this EOI.</li><li>The applicant should have an Average Annual Turnover of at least USD 30 Million during last three (3) years.</li><li>Evaluation criteria and other terms and conditions are described in the EOI document.</li></ol>
14	Name and Designation of Official Inviting Expression of Interest	Md. Salim Bhuiyan, PEng Executive Director (Engineering)
15	Address of Official Inviting the Expression of Interest	Corporate office: Rural Power Company Limited (RPCL), House No #19, Road No #1/B, Sector# 9, Uttara Model Town, Dhaka-1230, Bangladesh.
16	Contact details of Official inviting the Expression of Interest	Phone: +88-02-48961201 Fax: +8802-48963229, Email: <a href="mailto:enr_salim@yahoo.com">enr_salim@yahoo.com</a> , <a href="mailto:edengg@rpcl.gov.bd">edengg@rpcl.gov.bd</a>
17	RPCL reserves the right to accept or reject any or all the EOI Proposal or to annul the selection process at any stage without assigning any reasons thereof.	

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



*Salim*

*MD*

## Terms of Reference

For

### Selection of Joint Venture (JV) Partner for Implementation of Gazaria 50 MW Solar Photovoltaic (PV) Power Plant Project on IPP Basis

#### 1. Introduction

Rural Power Company Limited (RPCL) is one of the Governments owned Power Generation Company of Bangladesh. It was registered as a public Ltd 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 392 MW of electricity from its 4 (Four) power stations. 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 four operating plants of its own.

Power Division has set a target for RPCL of a total of 2730 MW new power generation capacity which will be implemented within 2030 out of which 10% shall be from renewable sources. RPCL is like to implement 300 MW renewable energy based power plants at different locations of Bangladesh. Presently, RPCL is implementing a 100 MW Solar PV Power Plant (Indian Soft Loan: LoC-III, approved by ECNEC) at Madarganj, Jamalpur and decided to implement a 50 MW Solar PV Power Plant Project at Gazaria, Munshiganj by forming a JV company with interested and qualified local/foreign partner. RPCL authority decided to select a Joint Venture Partner for this Project by following the Open Tendering Methodology. For this purpose, RPCL authority is seeking a Joint Venture Partner having requisite credentials & experience.

RPCL has acquired 252.56 acres of land at Sholoani and Doulatpur Mouza, Imampur Union of Gazaria Upazila at Munshiganj District. The geographic location of the selected site is 23.51324°N and 90.60672°E. The land has been developed at 8.0 m PWD and embankment has been constructed to protect the land. Construction power is available at the Project Site. Part of this land (approximately 166.61 acres) will be used for implementation of the above-mentioned Solar PV Power Plant Project. The Energy produced by this Project will be evacuated through 230/132 kV Gazaria Grid Sub-Station of Power Grid Company of Bangladesh (PGCB). Electrical

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Interconnection Facility (EIF) will also be constructed from the Project site to Gazaria Grid Sub-Station. The length of 230 kV double circuit line will be 7 km approximately.

The Project will be developed with at least 70:30 debt equity ratio and equity component will be contributed in proportion by the parties. A Land Lease Agreement (LLA) will be signed with the RPCL and Joint Venture Company for implementation of the Project. Land Development, Earth Protection and others cost related to the Land will be valued mutually agreed by the parties as the equity for the Project of RPCL. Estimated time for Commercial operation date for the said project is December, 2024 and tenure of the PPA will be 20 years.

Accordingly, Expression of Interest (EOI) is invited to select Joint Venture Partner from the experienced and reputed Companies/Organizations for Implementation of 50 MW (70 MWp) Solar PV Power Plant Project at Gazaria under Munshiganj District in Bangladesh.

## 2. Instructions to Applicants

2.1 Interested Applicants are required to submit the following documents with one (1) original and three (3) copies of each of the following:

- i. Application for Expression of Interest;
- ii. A write-up on the project to enable the applicant on understanding of the project. The applicants are encouraged to visit project site before submitting the EOI;
- iii. Documentary evidence substantiating the fulfillment of Eligibility and Qualification Criteria as per Clause No. 4.0 of this TOR of EOI Document i.e.
  - i. Company Profile containing information about company's experience, resources, technical staff, organogram etc.;
  - ii. Articles of Association (AoA), Memorandum of Association (MoA), Particulars of Directors, incorporation or constitution certificate of the Applicant's;
  - iii. Details of Power Plants Experience (Name, Site, Location, Size, Award Mode, Award Date, Status of Completion of works, Beneficiaries etc.)
  - iv. Audited financial statements of the Applicants of last three (3) years and Credit facility with Financial Institution.

2.2 Each and every page of the EOI shall be duly numbered, signed & stamped by the authorized representative. The contents and pages should be indicated in the index page.

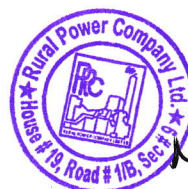
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- 2.3 A Project Implementation Schedule [Annexure-01] for Facility Development (considering COD within December, 2024) to be submitted along with the EOI.
- 2.4 All contracts and agreements will be governed and constituted in accordance with the Laws of Bangladesh.
- 2.5 The Applicant cannot transfer any share within six (6) years from the date of Commercial Operation (COD). After six (6) years of COD, share may be transferred with written consent from RPCL.
- 2.6 If any dispute or difference arises between two parties, in the first instance be amicably resolved between the parties. If any issue is not possible to resolve amicably the same will be referred to the arbitration council as per Bangladesh Arbitration act ,2001.
- 2.7 A list of major Plant Equipment's Technical Data [Annexure-02] to be submitted along with the Proposal.
- 2.8 In support of debt service, letters of commitment from the Competent authority of financial Institution should be submitted along with the proposal. Otherwise, proposal will not be considered for evaluation.
- 2.9 Equity shareholding between the parties will be determined during the signing of MOU. But the share of RPCL will be at least 30%.
- 2.10 The applicant shall be entitled to get fiscal incentives as per prevailing Statutory Regulatory Orders (SRO) issued by the relevant authority of GoB as per his share.
- 2.11 EOI proposal should be submitted in hard copy in a sealed envelope duly superscribed as "EOI for Selection of Joint Venture (JV) Partner for Implementation of 50 MW Solar Photovoltaic Power Plant Project on IPP basis at Gazaria, Munshiganj, Bangladesh" & "DO NOT OPEN BEFORE 12:30 (PM) on 12/05/2022" at the following address: Engr. Md. Salim Bhuiyan, Executive Director (Engineering), Corporate Office, RPCL, House 19, Road 1/B, Sector 9, Uttara, Dhaka-1230, Bangladesh. (EOI received through Fax, E-Mail or other electronic media will not be entertained).
- 2.12 RPCL shall not be responsible for any late receipt of EOI for reasons whatsoever. The EOI received after the specified date shall not be considered.
- 2.13 RPCL reserves the right to accept or reject any or all the EOI proposals or to annul the selection process at any stage without assigning any reasons thereof.

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### 3. Evaluation Criteria

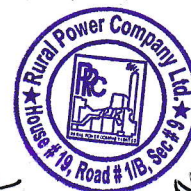
EOI received from the Applicants will be evaluated by a committee formed by RPCL Board on the basis of following criteria:

SL No.	Description of Criteria	Point
1	Experience in developing, own and operating of Grid Connected Solar PV Power Plant within last five (5) years. Experience of wholly owned subsidiary/ parents org. will be considered.	10
2	Organogram, technical staff and resources of the applicant company	5
3	Technical Approach, Methodology and Project Schedule for Performing the Assignment.	5
4	Average Annual Turnover during the last three (3) financial years.	10
5	Average Annual Net worth and Profit for last three (3) years.	10
6	Liquid Asset of the Organization.	10
7	Investment capability of the applicant from its own source.	20
8	EPC Cost of the Project including Power Evacuation.	15
9	Financing Cost	15
Total Points		100

### 4. Eligibility and Qualification Criteria:

#### 4.1 General Eligibility

- i. The Applicant should be incorporated legally in any country except Israel.
- ii. No consortium will be allowed.
- iii. The experience of the Parent Company/wholly owned subsidiary may be accepted.



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#### 4.2 Qualification Criteria

- i. Applicant, as Solar Power Project Developer, should have experience solely in developing, own and operating at least cumulative 50 MW Grid Connected Solar PV Power Plants within last five (5) years from the last date of submission of this EOI.
- ii. The applicant should have an Average Annual Turnover of at least USD 30 Million during last three (3) years.

(If not fulfilled the above criteria, the application will not be considered for evaluation.)

#### 5. Language

The EOI Proposal and all related correspondence and documents shall be in English language. Supporting documents and printed literature furnished by the Applicant with the EOI may be in any other language provided that they are accompanied by exact translations of all the pertinent passages in the English language, duly authenticated and certified by the Applicant. Supporting materials, which are not translated into English, may not be considered. For the purpose of interpretation and evaluation of the EOI proposal, the English language translation shall prevail.

#### 6. Period of EOI Validity:

EOI validity period: 120 (One Hundred Twenty) days from the last date submission of EOI which may be extended for a further period from time to time to be decided mutually by RPCL and the applicants, if required.

**Submission Date of EOI:** Before 12:30 PM on 12.05.2022.

**Pre-Proposal Meeting:** will be held on 12.04.2022 at 11:00 hours (BST) in the following address:

House-19, Road-1/B, Sector-9, Uttara Model Town, Dhaka-1230, Bangladesh

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*[Signature]*

**Annexure-01: Applicant's Project Implementation Schedule**

Sl. No.	Activity	Months													
		1	2	3	4	5	6	7	8	9	10	11	12	n	
1	Joint Venture Agreement														
2	SPV Formation														
3	LOI														
4	PPA & IA Approval														
5	Feasibility Study														
6	Owner's Engineer Selection														
7	EPC Contractor Selection														
8	Financial Closing														
9	EPC Mobilization														
10	Civil Construction Work														
11	Procurement of Major Equipment														
12	Major Equipment Installation														
13	Electrical Interconnection Facility														
14	Testing for Initial Operation														
15	Testing for Commercial Operation														
16	Commercial Operation Date														
17	Any others activity if required.														





## Annexure-02: Technical Data and Submittals

### Table of Contents

SL No.	Description
1	Basic Technical Information
2	Drawings
3	Proposed Project Design and component experience
4	Detailed Technical Information

### TECHNICAL DATA

#### 1. Basic Technical Information

- Provide a short description of the Project.
- Source (Country of Origin) of major Equipment.

#### 2. Drawings

- Plant Layout Drawing (General Arrangement) on Sholoani Mouza (166.61 Acres): Land area diagram is attached.
- Single Line Diagram of Power Plant.



3. Proposed Project Design: Applicant should describe the conceptual Project Design in short based on 2(a) and 2 (b).

4. Detailed Technical Information

The Project shall be of Proven Design, built to appropriate internationally recognized standards and complying with all applicable statutory codes and regulations. Project reliability, availability and maintainability consistent with high efficiency are paramount importance. So, Applicant shall select the Major Plant Equipment in such a way that to fulfill the above design criteria. The Bidder fill out the data sheets provided herewith.

Technical Specification of Major Plant Equipment which is considered for determining Project EPC Cost.		
	Description	Requested to Fill up
4.1	<b><u>PV Module</u></b>	
	Manufacture	
	Model No.	
	Country of Origin	
	Efficiency	
	Number of PV Module	
	Output of each PV Module	
4.2	<b><u>Grid Tied Inverter (GTI)</u></b>	
	Manufacture	
	Model No.	
	Country of Origin	
	Efficiency	
	Number of GTI	
	Capacity of each GTI	
	Operating voltage range	
	Frequency range	
	Total Harmonic Distortion	
4.3	<b><u>Inverter Transformer</u></b>	
	Manufacture	
	Model No.	
	Country of Origin	
	Number of Inverter Transformer	
	Voltage Rating of each Inverter Transformer	
4.4	<b><u>Power Transformer</u></b>	
	Manufacture	



Technical Specification of Major Plant Equipment which is considered for determining Project EPC Cost.	
	Model No.
	Vector Group
	Country of Origin
	% of Impedance:10-12%
	Number of Power Transformer
	Voltage Rating of each Transformer
	Capacity of each Transformer
4.5	<b>Solar Irradiation Measurement Device</b>
	Manufacture
	Model No.
	Type
	Country of Origin
	Spectral Range: 285 to 2800 nm
	Sensitivity: 7 to 14 $\mu\text{V}/\text{W}/\text{m}^2$
	Direction Error: < 10 W/ $\text{m}^2$
	Field of View:180 °
Response Time:< 5s	
4.6	<b>Static VAR Capacitor</b>
	Minimum Capacity 20 MVAR
	Model No.
4.7	<b>SCADA System</b>
	Manufacture
	Model No.
	Type
4.8	Country of Origin
	<b>Communication System</b>
	Manufacture
	Model No.
4.9	Type
	Country of Origin
	Other if any



**Annexure-03: Break down of EPC Cost in US\$**

**(Supply, Installation, Testing and Commissioning including CD, VAT and others Levies)**

SL No.	Item	Unit	Nos of Unit	Unit Cost (US\$)	Total Cost (US\$)
1	Solar PV Module	MWp			
2	Module Mount Structure	Nos			
3	Central Inverter	MVA			
4	DC/AC Cable, Communication Cable, Optical Cable & Control Cable	RM			
5	SCADA System	No.			
6	Illumination System (LED Based)	LS			
7	Sub-Station at Project Site in all respect	LS			
8	Construction of Transmission Line	LS			
9	Bay Extension	LS			
10	Radiation Measurement System	Nos			
11	Mandatory Spare	LS			
12	Water Supply System	LS			
13	Civil Works (Dormitory, Office Building, Ansar Barack, Work Shop, Internal Road, Drainage System etc)	LS			
14	Others Cost if any	LS			

\*Applicant shall submit others cost if it not included in the Annexure-03.



**Annexure-04: Amortization Schedule**

Applicant shall provide the Amortization Schedule for Debt Portion including all related Project Financing Cost.



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