

**MAHATMA PHULE BACKWARD CLASS DEVELOPMENT
CORPORATION LIMITED**

(A Govt. of Maharashtra Undertaking)



Enquiry FOR SELECTION OF SOLAR POWER CONSULTANT
(SPC) FOR PREPARATION OF DETAILED PROJECT REPORT
(DPR) FOR SETTING UP 125 to 150 MW SOLAR PROJECT
AT SANGLI IN PUNE REVENUE DIVISIONS OF
MAHARASHTRA

1 INTRODUCTION

1.1 Background

- 1.1.1 MNRE, New Delhi has rolled out the scheme of Solar Park to fulfill the ambitious target of setting 100 GW Solar Plants in India. Also, Govt. of Maharashtra has announced the State Renewable Energy Policy 2020 to set up 17360 MW renewable energy projects in Maharashtra, out of which 10000 MW is projected from solar energy.
- 1.1.2 The Mahatma Phule Backward Class Development Corporation Ltd is set up by the Govt. of Maharashtra as on 10th July 1978 for the economic up-liftment of scheduled Castes and Nav- Buddha's MPBCDC LTD is known for its pioneering & innovative welfare- oriented programs & schemes for the backward class communities.
- 1.1.3 Mahatma Phule Renewable Energy and Infrastructure Technology Ltd. (MAHAPREIT) a subsidiary company of Mahatma Phule Backward Class Development Corporation Ltd is incorporated under the Company's Act 2013 (18 of 2013) on 12/04/2021.
- 1.1.4 MAHAPREIT has decided to develop around 125 to 150 MW Solar Park at Sangli and the land for the same has been identified. Further, the feasibility report for setting up Solar Park at Sangli has been prepared. The Solar park intends to provide opportunities to the entrepreneurs and Start Ups from the backward classes to demonstrate their capabilities thereby ensuring beneficiaries from the backward classes by providing employment generation opportunities and will also ensure their socio-economic development.

1.2 Enquiry for Proposal

MPBCDC LTD invites the Enquiry for Proposal on enquiry basis for selection of Solar Power Consultant (SPC) for Preparation of Detailed Project Report (DPR) for setting up 125 to 150 MW Solar Parks at Sangli in Pune Revenue Divisions of Maharashtra.

1.3 Validity of the Proposal

The Proposal shall be valid for a period of not less than 120 days from the Proposal Due Date (the PDD”).

1.4 Communications

- 1.4.1 All communications including the submission of Proposal should be addressed to:
The General Manager, MPBCDC Ltd,

Juhu Shopping Complex, Gulmohar Lane -9,
JVPD, Juhu, Mumbai.

1.42 The Official Website of the MPBCDC is: www.mahatmaphulecorporation.com

1.43 All communications, including the envelopes, should contain the following information, to be marked at the top in bold letters:

Enquiry No. MHA/CGM/REEM/Solar Park/618

Name of the Project “Selection of Solar Power Consultant (SPC) for Preparation of Detailed Project Report (DPR) for setting up 100 MW Solar Parks at Sangli in Pune Revenue Divisions of Maharashtra.”

2.1 Conflict of Interest

2.1.1 The consultant shall hold the Owner’s interest paramount and strictly avoid conflict with other assignments or their corporate interests.

2.1.2 Prohibition of Conflicting Activities

The consultant and their affiliates shall not engage, either directly or indirectly, in any business or professional activities which would conflict with the activities assigned to them under this Contract.

2.2 Time Schedule/Completion Period

The estimated time period for completion of the assignment is two months from the date of issue of the work order. However, this could undergo a change and completion of all activities will be the terminal point of the assignment being quoted by the bidder and not the time duration.

2.3 Cost of Proposal

The Applicants shall be responsible for all of the costs associated with the preparation of their Proposals and their participation in the Selection Process including subsequent negotiation, visits to the Authority, Project site etc. The Authority will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Selection Process.

2.4 Right to reject any or all Proposals

Notwithstanding anything contained in this RFP, the Authority reserves the right to accept or reject any Proposal and to annul the Selection Process and reject all Proposals, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof.

2.5 Language

The Proposal with all accompanying documents (the “**Documents**”) and all communications in relation to or concerning the Selection Process shall be in English language. In case any of these Documents is in another language, it must be accompanied by an accurate translation of the relevant passages in English, in which case, for all purposes of interpretation of the Proposal, the translation in English shall prevail.

2.6 Format and signing of Proposal

2.61 The Applicant shall provide all the information sought under this enquiry. The Authority would evaluate only those Proposals that are received in the specified Annexures and complete in all respects.

2.62 The Proposal shall be typed or written in indelible ink and signed by the authorized signatory of the Applicant who shall initial each page, in blue ink. In case of printed and published Documents, only the cover shall be initialed. All the alterations, omissions, additions, or any other amendments made to the Proposal shall be initialed by the person(s) signing the Proposal. The Proposals must be properly signed by the authorized representative (the “**Authorized Representative**”) as detailed below:

(a) by the proprietor, in case of a proprietary firm; or

(b) by a partner, in case of a partnership firm and/or a limited liability partnership; or

(c) by a duly authorized person holding the Power of Attorney, in case of a Limited Company or a corporation; or

A copy of the Power of Attorney certified under the hands of a partner or director of the Applicant and notarized by a notary public in the form specified in Annexure II shall accompany the Proposal.

2.7 Financial Proposal

2.7.1 Applicants shall submit the financial proposal in the formats at Appendix clearly indicating the total cost of the Consultancy **(Annexure-III)** in both figures and words, in Indian Rupees, and signed by the Applicant’s Authorized Representative. In the event of any difference between figures and words, the amount indicated in words shall prevail. In the event of a difference between the arithmetic total and the total shown in the Financial Proposal, the lower of the two shall prevail.

(i) Costs shall be expressed in INR excluding GST which shall be indicated separately in the Financial Proposal.

2.8 Submission of Proposal

2.8.1 The Applicants shall submit the Proposal in **ONLY IN HARD BOUND FORM** with all pages numbered serially and by giving an index of submissions. Each page of the submission shall be initialed by the Authorized Representative of the Applicant as per the terms of the enquiry.

2.8.2 The Proposal will be sealed in an outer envelope which will bear the address of the Authority, enquiry

number, Consultancy name and the name and address of the Applicant. It shall bear on top, the following:

“Do not open, except in presence of the Authorized Person of the Authority” If the envelope is not sealed and marked as instructed above, the Authority assumes no responsibility for the misplacement or premature opening of the contents of the Proposal submitted and consequent losses, if any, suffered by the Applicant.

- 283 The completed Proposal must be delivered on or before the specified time on Proposal Due Date. Proposals submitted by fax, telex, telegram or e-mail shall not be entertained.
- 284 The Proposal shall be made in the Annexures specified in this enquiry. Any attachment to such Annexures must be provided on separate sheets of paper and only information that is directly relevant should be provided. This may include photocopies of the relevant pages of printed documents. No separate documents like company brochures, copy of contracts etc. will be entertained.
- 285 The rates quoted shall be firm throughout the period of performance of the assignment upto and including acceptance of the deliverables by the Authority and discharge of all obligations of the Consultant under the Agreement.

2.9 Proposal Due Date

- 29.1 Proposal should be submitted on or before 18/07/2022 upto 11.30 Hrs.

2.10 Late Proposals

Proposals received by the Authority after the specified time on Proposal Due Date shall not be eligible for consideration and shall be summarily rejected.

2.11 Evaluation of Proposals

- 211.1 Prior to evaluation of Proposals, the Authority will determine whether each Proposal is responsive to the requirements of the enquiry. The Authority may, in its sole discretion, reject any Proposal that is not responsive hereunder. A Proposal shall be considered responsive only if:
- (a) The Technical Proposal is received in the form specified at Annexure I;
 - (b) It is received by the Proposal Due Date including any extension thereof;
 - (c) It is signed, sealed, bound together in hard cover.
 - (d) It is accompanied by the Power of Attorney
 - (e) It contains all the information (complete in all respects) as requested in the enquiry.
 - (f) It does not contain any condition or qualification; and
 - (g) It is not non-responsive in terms hereof.
- 211.2 The Authority reserves the right to reject any Proposal which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by the Authority in respect of such Proposals.
- 211.3 Applicants are advised that Selection will be entirely at the discretion of the Authority. Applicants will

be deemed to have understood and agreed that no explanation or justification on any aspect of the Selection Process or Selection will be given.

- 2.11.4 Any information contained in the Proposal shall not in any way be construed as binding on the Authority, its agents, successors or assigns, but shall be binding against the Applicant if the Consultancy is subsequently awarded to it.

2.12 Confidentiality

Information relating to the examination, clarification, evaluation, and recommendation for the selection of Applicants shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional adviser advising the Authority in relation to matters arising out of, or concerning the Selection Process. The Authority will treat all information, submitted as part of the Proposal, in confidence and will require all those who have access to such material to treat the same in confidence. The Authority may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/or the Authority.

2.13 Clarifications

- 2.13.1 To facilitate evaluation of Proposals, the Authority may, at its sole discretion, seek clarifications from any Applicant regarding its Proposal. Such clarification(s) shall be provided within the time specified by the Authority for this purpose. Any request for clarification(s) and all clarification(s) in response thereto shall be in writing.
- 2.13.2 If an Applicant does not provide clarifications sought within the specified time, its Proposal shall be liable to be rejected. In case the Proposal is not rejected, the Authority may proceed to evaluate the Proposal by construing the Particulars requiring clarification to the best of its understanding, and the Applicant shall be barred from subsequently questioning such interpretation of the Authority.

2.14 Placement of work order

A detailed work order will be issued to the the selected bidder incorporating all the terms and conditions for execution of the contract.

2.15 Proprietary data

Subject to the provisions of Clause 2.20, all documents and other information provided by the Authority or submitted by an Applicant to the Authority shall remain or become the property of the Authority. Applicants and the Consultant, as the case may be, are to treat all information as strictly confidential. The Authority will not return any Proposal or any information related thereto. All information collected, analyzed, processed or in whatever manner provided by the Consultant to the Authority in relation to the Consultancy shall be the property of the Authority.

2.17 Acceptance of Proposal

The proposal with lowest financial quote shall be considered for award of assignment.

3 TERMS OF REFERENCE/SCOPE OF WORK, DELIVERABLES AND PAYMENT TERMS

Part A :- Preparation of Detailed Project Report of Solar PV System

- i. The Consultant shall carry out the site survey on the potential of solar PV capacity.
- ii. The Consultant shall carry out detailed survey, if required to obtain key data such as radiation, accessibility, power evacuation and generation estimation, other infrastructural modes etc.
- iii. The Consultant will identify the Points where Soil Investigation is to be arranged by MAHAPREIT through third party.
- iv. The Consultant shall carry out Technical analysis (Shadow Analysis) of data acquired from site survey including but not limited to shadow free area, energy generation, evacuation points etc.
- v. The Consultant shall undertake detailed feasibility studies of the above-mentioned proposed site for developing Ground Mounted Solar PV Power Plant.
- vi. Working out the cost of the components as per regular industry practices, Estimated Project Cost and Financial analysis of the project
- vii. The Consultant upon getting all the data shall generate data including not limited to generation estimation; suitable business model; detailed economic analysis benchmarking against IRR, NPV and DSCR; identifying revenue streams, and so on.
- viii. Sensitivity analysis for various options of returns for various parameters including but not limited to:
 - Debt: Equity Ratio of 70:30, 80:20 and 90:10
 - Interest Rates
 - O&M Expenses
 - Working Capital
- ix. The Consultant shall develop Project specification and on the basis of the Pre – Feasibility report prepare Detailed Project Report (DPR).
- x. The Consultant shall submit conceptual plan detail in DPR & provide assistance proof checking & Certification of all GTP, QAP, Specification, Planning, Drawings & Designs submitted by EPC contractor for each location.
- xi. The Consultant shall review and approve all GTP, QAP, Specification, Planning, Drawings/Designs and ensure that the same are as per Technical specification of tender and recommend the same for approval of MAHAPREIT and consultant shall also ask for appropriate compliances if any.

xii. Preparation of Bankable DPR:

Consultant will have to carry out Detailed Project Report of these sites for PV solar projects scope of work includes following Collection and generation of Commercial, Technical, Environmental and Social Assessment within the study area. This data should be relevant to decisions about project location, design, construction, operation, or mitigation measures.

The following template should be used for developing/strengthen the DPR:

- Executive summary
- Background introduction

- Current Energy Scenario in India
- Current Energy scenario in Maharashtra
- Climate Change and India's Emissions
- Renewable Energies
- Current Worldwide Scenario
- Carbon credits
- Solar Energy Potential in India
- National solar Mission
- Solar Energy Potential in Maharashtra
- Renewable Purchase Obligation mechanism - Maharashtra
- Solar Technologies Overview
- PV project
 - General Introduction
- Site Location
 - Environmental data (temperature, wind speed, wind direction, rainfall, humidity, dust analysis, corrosion analysis)
 - Maximum rain flood information.
 - Maximum storm gust information
 - Assessment of solar resources available (several databases), GHI: NREL, Meteonorm, 3Tier,
 - The distance to substation and allocation of the sub-station (required upgrades)
 - Access upgrades required (roads and bridges)
 - Assess water requirements, availability from ground water sources, or other surface water sources

- Topographic Mapping and Geophysical Analysis
 - Standard Penetration Test
 - Laboratory Testing
 - Local Geologic Settings
 - Groundwater
 - Geologic Hazards
 - Landslides
 - Flooding and Erosion
 - Subsidence
 - Poor Soil Conditions
 - Primary Ground Rupture
 - Strong Ground Motion
 - Liquefaction
 - Foundations
 - Earthwork
 - Soil resistivity analysis
- Solar resource Available (several databases)
- Infrastructures and accesses
 - Existing Infrastructures
 - Requires infrastructures
 - Water
 - Roads
 - Power Evacuation System
- Overview of Proposed PV project
 - Recommendation of maximum capacity to be installed at a particular site
 - To estimate electricity generation from the solar PV power plant based on the solar radiation pattern of the site and different PV technologies with and without tracking system.
 - Shadow analysis and planning of land development work.
 - Possible site & plant layout design & drawings.
 - Material required and quantity of material along with technical specification of equipments & erection work cost.
 - Detailed Costing of the project on the basis of market current rates.
 - Shortest possible path for erection of transmission line from solar plant to substation.
 - Detailed technical specifications & costing of supply & erection of transmission line from the
- Environmental analysis
 - Environment Clearance
 - Flora and Fauna
 - Environment Management Plan (EMP)
 - Environmental impact assessment & survey

- Social Environmental analysis
 - Affected people
 - Tribal lands
 - Encroachment
 - Compensations for livelihood affected people
 - Assess the likely impacts of the sub-project, in terms of land acquisition/transfer (loss of lands, houses, livelihood, etc.), and resultant involuntary resettlement extent and undertake the census of potential project affected people;
 - Identify likely loss of community assets including the religious structures and common property resources (e.g. forest, grazing land, drinking water source, etc.) within project site; the impacts of their loss on the local population, and prepare mitigation plans
 - Social impact assessment
 - Ecology or biodiversity
 - Physical or cultural heritage (if any)
 - Flooding and seismic risk
 - Hazardous and domestic waste management, etc.
 - Review of the land take/lease process to assess any legacy or current/existing issues (like informal settlers, livelihood dependence, other usage etc) on the allotted land. It will also look at current and proposed development activities within the project's area of influence, including those not directly connected to the project.
 - The Urban Zoning information (agricultural, industrial, urban) with any urban restrictions that may be known.

- Estimated costs
 - PV power plant
 - Material required and quantity of material along with technical specification of equipments & erection work cost.
 - Detailed Costing of the project on the basis of market current rates.

 - Power Evacuation System
 - Shortest possible path for erection of transmission line from solar plant to substation.
 - Detailed technical specifications & costing of supply & erection of transmission line from the

 - Internal & external roads and Accesses
 - Water
- Financial analysis on different financial models of PPP
 - Cash-flow detailed analysis
 - Risk analysis
 - IRR and ROE

- Corporate Social responsibility
 - General
 - Air, Noise, Water and Soil Monitoring
- Annexes
 - Google earth based image of the land
 - Environmental clearance for Solar Photovoltaic (PV) Power Project
 - Other environment Clearances...
 - Detailed activities for Roads
 - Ambient Air Quality Monitoring Report at Solar Park.
 - Ambient Noise Monitored Report
 - Analysis Report of Soil
 - Analysis of Ground Water

Deliverable 1: Submission of Detailed Project Report

Part B :- PAYMENT TERMS

The payment will be released only after submission and acceptance of DPR and Bid process management by MPBCDC/ MAHAPREIT.

I) Part A: Preparation of Detailed Project Report

S. No.	Particulars	Consultancy Fees in %
1	On Submission of Draft Detailed Project Report	70 % of quoted Price
2	On submission and Acceptance , Approval of Detailed Project Report by MPBCDC/ MAHAPREIT	30 % of quoted Price

4 ANNEXURES

ANNEXURE I APPLICATION PROFORMA FOR CONSULTANTS

General Information		Ref. page No. of documentary proof in the Application
(i) Name and address of the consultant/consulting firm		
(ii) Whether Pvt. Ltd. Company/JV/Public Co./Others		
(iii) Name of the authorized contact person /representative duly certified by the head of the consulting firm		
(iv) Profile of the firm (Please elaborate field of activities)		
STRUCTURE & ORGANISATION OF FIRM		
Date, month and year of incorporation of Firm		
Standing of the firm (As on 01.04.2021)	__Years	
<p>NOTE: (i) (The consultant shall submit, a copy of original document defining constitution or legal status, place of registration, principal place of business and power of attorney. In case of a proprietary firm and partnership firm, the document related to registration of the firm with concerned government department shall be submitted. In case of a company, Memorandum of Association and Article of Association, Name of directors and shareholders shall also be furnished.)</p>		

Annexure-II

Power of Attorney

Know all men by these presents, we, (name of Firm and address of the registered office) do hereby constitute, nominate, appoint and authorize Mr / Ms..... son/daughter/wife and presently residing at, who is presently employed with us and holding the position of as our true and lawful attorney (hereinafter referred to as the “Authorized Representative”) to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Proposal for and selection as the Consultant for [Name of Project] , proposed to be developed by the MPBCDC including but not limited to signing and submission of all applications, proposals and other documents and writings and providing information/ responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts and undertakings consequent to acceptance of our proposal and generally dealing with the Authority in all matters in connection with or relating to or arising out of our Proposal for the said Project and/or upon award thereof to us till the entering into of the Agreement with the Authority.

AND, we do hereby agree to ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Authorised Representative pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Authorised Representative in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF , 2014

For

(Signature, name, designation and address)

Witnesses:

- 1.
- 2.

Notarized Accepted

.....

(Signature, name, designation and address of the Attorney)

Notes:

The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure. The Power of Attorney should be executed on a non-judicial stamp paper of Rs. 100 (one hundred) and duly notarized by a notary public.

Wherever required, the Applicant should submit for verification the extract of the charter documents and other documents such as a resolution/power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Applicant.

Annexure III

Financial Proposal

Subject:”

Part A:- Submission of Detailed Project Report (DPR)

Item	Rate in Rs
	Total Costs of Scope of work for Part A (Submission of Detailed Project Report i.e. DPR)
Goods & Service Tax	----- (Rs in Words) ----- (Rs in Figure)
Total	----- (Rs in Words) ----- (Rs in Figure)