

# ಕರ್ನಾಟಕ ನವೀಕರಿಸಬಹುದಾದ ಇಂಧನ ಅಭಿವೃದ್ಧಿ ನಿಯಮಿತ KARNATAKA RENEWABLE ENERGY DEVELOPMENT LIMITED

(A Government of Karnataka Undertaking)

KREDL/07/SG/ Bidar Solar Park/2023/Call2/F-1403/2145

Dated:08.9.2023

To, Consultants,

#### INVITATION LETTER - Call 2

Sir,

Sub: Call-2 for submission of Financial Proposals to engage the service of reputed consultancy firm for preparation of Detailed Project Report and Bid Documents for development of solar park in Aurad taluk and Bidar district.

Ref: KREDL/07/SG/ Bidar Solar Park/2023/ 2077 dated 30.8.2023

Karnataka Renewable Energy Development Limited (KREDL) intends to develop Solar Park of about 500MWac in Aurad Taluk, Bidar district, Karnataka. In this regard, KREDL invites financial proposals to engage the service for preparation of Detailed Project Report for development of solar park in Bidar District, Karnataka from the reputed firms among the panel members who have already been prequalified by GoK vide notification No, IDD 1 ITS 2019 dated 10.10.2019 and its amendments.

The scope of the work includes preparation of Feasibility Reports, Detailed Project Report and solar resource assessment, estimation of energy yield and optimization of plot sizing, layout, infrastructure and others as per MNRE requirements.

Once again, it is hereby requested to submit your financial proposal for participating in the bid within the specified time mentioned in the document.

-sd-Assistant General Manager

ನಂ. 6/13/1, 10ನೇ ಬ್ಲಾಕ್, 2ನೇ ಹಂತ, ನಾಗರಭಾವಿ, ಬೆಂಗಳೂರು – 560 072.

ಫೋ.: 2228 2220, 2220 8109, 2220 7851,

ಫ್ಯಾಕ್ಸ್: 080 - 2225 7399

BIL

#6/13/1, 10th Block, 2nd Stage, Nagarbhavi, Bengaluru - 560 072.

E-mail: kredlmd@gmail.com Tel.: 2228 2220, 2220 8109, 2220 7851

Fax: 080 2225 7399

GSTIN: 29AACCK3953F1ZG PAN: AACCK3953F

# Request for Financial Proposal for

# Selection of a consultancy firm for Preparation of DPR for Development of 500MW<sub>AC</sub> Capacity Bidar Solar Park in Aurad Taluk, Bidar district of Karnataka State



## Karnataka Renewable Energy Development Limited

(A Government of Karnataka Undertaking) # 6/13/1, K.R.E.D.L Office Building, 10th Block, 2nd Phase, Nagarbhavi, Bengaluru-72

# **Table of Contents**

Sl. No	Description	Page No
1	Background	3
2	Objective	3
3	Scope of Services	3
4	Deliverables	7
5	Penalty for the Delay in completion/Liquidated damages	7
6	Extension of time	7
7	Submission of Deliverables	8
8	Duration of the Contract	8
9	Information to participant regarding the procedure for submission of proposal	8
10	Submission of application and Evaluation of Financial Proposal	12
11	Confidentiality of data and documents	14
12	Conflict of interest	14
13	Rights of KREDL	14
14	Termination of Contract	14
15	Validity	14
16	Amendments to the RFP	14
17	Payment terms	15
18	Liability of the Firm	15
19	Prebid Queries	15

# Request for Financial Proposal for "Selection of a Consultancy Firm for preparation of DPR for Development of Solar Park at Bidar District, Karnataka

#### 1. Background

The State of Karnataka is bestowed with vast potential of renewable energy. KREDL is taking all necessary steps to exploit the renewable energy resources for the maximum benefit and support GoI in reaching target of 500 GW by 2030.Karnataka Renewable Energy Development Limited (KREDL) intends to develop a Solar Park of 500MWAC in Aurad taluk, Bidar District, Karnataka under ISTS mode. The Central Electricity Authority (CEA) has finalized the location in Malegaon village of Aurad Taluk for establishing 765/400/220kV Bidar Pooling Station and accordingly M/s. REC Power Development and Consultancy Limited has invited tender for selection of Transmission Service provider through tariff based competitive bidding (TBCB) process for construction of 765 kV line and polling station for solar energy zone in Bidar.

MNRE has come up with a scheme for development of Solar /Renewable Energy Ultra-Mega Parks. A Park is a concentrated zone of development of Renewable power generation projects and provides developers an area that is well characterized with proper infrastructure, access to amenities and where the risk of the project can be minimized.

The State of Karnataka is bestowed with vast potential of renewable energy. KREDL is taking all necessary steps to exploit the renewable energy resources for the maximum benefit and support GoI in reaching target of 500 GW by 2030. In this context, KREDL intends to engage a consultant for Preparation of DPR for the development of 500MW Solar Park in Aurad taluk, Bidar district, Karnataka.

#### 2. Objective

KREDL invites financial proposals to engage the service of Consultants for preparation of Detailed Project Report and RFP of solar park of capacity 500 MW $_{AC}$  in Bidar district, Karnataka from the reputed firms among the panel members who have been already prequalified by GoK vide notification No, IDD 1 ITS 2019 dated 10.10.2019 and its amendments

The scope of work includes site survey, preparation of Feasibility Reports, , solar resource assessment, estimation of energy yield and optimization of plot sizing, lay out, infrastructure, Detailed Project Report and others in Aurad taluk, Bidar district of capacity  $500MW_{AC}$  as **per MNRE requirements as enclosed in Annexure –I** 

#### 3. Scope of Services:

The broad Scope of the consultant services required under this RFP is as follows:

- 1. Preparation of Feasibility Report and Detailed Project Report (DPR) for solar park of 500MW<sub>AC</sub>capacity in Aurad taluk, Bidar district in the State of Karnataka.
- 2. The assignment to be implemented of  $500MW_{AC}$  capacity Solar Park capacity in Aurad taluk, Bidar district in the State of Karnataka.
- 3. The assignment shall be broadly divided in two parts viz:
  - a. Preparation of Feasibility Report with working out various Business Models /Options/Strategy/Route for investment for Techno-commercial viability of the Park

- considering available land, basic infrastructure, evacuation possibilities, power future market scenario, regulation, government /MNRE guidelines etc
- b. Preparation of Detailed Project Report (DPR) based on the Feasibility Options selected and finer input data on engineering and other parameters etc..(The Contents for Detailed Project Report as per MNRE guidelines in enclosed Annexure I).
- 4. The DPR shall be prepared to meet requirements of all Financial Institutions, MNRE, Govt. Regulatory bodies etc., to comply with their norms for Project appraisal and sanction and approval lending and tie up of Financing etc. In short, DPR must have a bankability to promote for investment destination.
- 5. The Broad scope of service consist of Preparation of DPR for development of solar park comprising both technical & commercial analysis to understand the attractiveness, feasibility, risks & mitigation plans related with setting up of solar park of capacity 500MW<sub>AC</sub>in Aurad taluk, Bidar district in the State of Karnataka.
- 6. The key aspects to be analyzed during the preparation of the Detailed Project Report (DPR) should encompass the contents outlined in Annexure-1, as per the guidelines provided by MNRE."
- 7. "The preparation of the Detailed Project Report (DPR) should encompass analyzing key aspects as outlined in Annexure-1( enclosed) titled 'Table of Contents for Detailed Project Report for Solar Park' provided by MNRE. This annexure provides a comprehensive structure for organizing the contents of the DPR."

#### a. Feasibility Report:

The firm shall provide initial feasibility report to understand the development model for Proposed Solar Park of capacity  $500 MW_{AC}$  in Aurad taluk, Bidar district in the State of Karnataka. Feasibility report shall consist of development model possible for Solar Park, Regulatory approvals, Proposed Buyer of electricity generation, Probable buyer for signing Power Sale Agreement etc.

#### b. Detailed Project Report:

Detailed project reports shall consist of Technical as well as financial parameters for development of solar park of capacity  $500MW_{AC}$  in Aurad taluk, Bidar district in the State of Karnataka.

#### 3.1 Task-I: Technical Assessment:

The Firm shall:

- Conduct Site Engineering Assessment, and soil testing reports, assessment of solar radiation resource, and direct normal insolation study for analyzing the extent and requirement of design; (soil testing, topography details/contour survey report, hydrology data, and load flow assessment for the proposed substation shall be provided by KREDL)
- 2. Preparation of Plot Plan/ Layout design for solar park with optimum utilization of land/infrastructure/ facilities; including cable trenching, detailed layout for road and drainage system, detailed layout for internal transmissions system and transmission line up to nearest STU, area grading/land preparation works, boundary wall/fencing, illumination, horticulture/ green belt, landscaping, warehouses/ storage sheds & Admin Buildings, telecom infrastructure, fire-fighting system, security control room, medical & ambulance facilities, mechanical & electrical workshops etc.

- 3. Prior to finalization of DPR, Consultant shall work out and provide various options of Plot sizing with energy yield estimate and other aspects of infrastructure to evaluate each option on merit of sale ability and attractiveness to investor, final tariff from the project developed in the park and return on investment to KREDL from Solar Park as a whole considering all aspects. Based on the evaluation, KREDL may finalize few options and the same may be included in DPR to project techno-economic viability of the project.
- 4. Prepare a Power Evacuation Plan for solar parks including 220/130/33 KV substations& auxiliary power distribution network, metering arrangement, pooling arrangement, cabling, lightning arrestors, transformers & associated infrastructure; transmission lines for evacuation to nearest CTU/STU substation; augmentation of existing substations, if required etc.;
- 5. Prepare a Power evacuation scheme with preliminary SLD for the electrical system starting from plant evacuation to the Grid connectivity point. Brief description and broad parameters of all electrical equipment;
- 6. Build scenarios of capacity utilization factor for the proposed solar power projects in the park with various technology options (both PV crystalline & thin-film tracking mechanism), in the identified parcel of land etc.;
- 7. Prepare Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) as per MNRE requirements for Detailed Project Report Preparation.
- 8. Conduct soil testing, topography details/contour survey, hydrology study to the identified land parcel.
- 9. Guide for LTDA and Connectivity approval from CTU for evacuation of power from the proposed evacuation system.
- **Annexure 1:** "Table of Contents for preparation of Detailed Project Report for Solar Park" Provides contents for preparation of Detailed Project Report issued by the Ministry of New and Renewable Energy that need to be followed during the technical assessment and preparation of the detailed project report.

#### 3.2 Task-II: Financial Assessment and Commercial Feasibility Report

#### The Firm shall:

- 1. Prepare separate block cost estimates of individual project components, structures, approach roads within the boundary of the project including drainage, water supply, etc., hard & soft landscaping and all other infrastructure services;
- 2. Financial assessment covering financial assumptions and inputs like development phases, forecast of costs, availability of grants etc. to provide Funds Requirement, Project IRR, Pay Back Period, DSCR and other financial ratios for the solar parks;
- 3. Structuring and determining the various park charges to be recovered from the project developer;
- 4. Financial Model shall be developed in order to provide the financial projections; that shall cover the standard modules including capital expenditure, financing plan, operating costs and financial statements;
- 5. These models shall have Sensitivity Analysis developed to understand the impact of variations in major inputs parameters (such as cost, revenue, rate of interest etc.) on the output parameters/ project returns (such as IRR, RoI, RoCE, Payback period etc.);
- 6. Structuring of Project Revenue Model considering the various business plan, land area requirement & technology options, suggestions for improving viability for successful marketing of the project etc.

- 7. The role of the developer and operator in design, construction, finance, disposal, maintenance, and transfer shall be clearly identified. Such suggestions may include proposal for grants, if required, with justification for improving the viability of the project along with cost and phasing of such grants;
- 8. Identify the sources of the funds and advise on availability of grants from any scheme/GoI or any other organization for the Project.

#### 4. Deliverables

Initially consultancy firm shall prepare a Brief Feasibility Report to understand the Business Model. In consultation with KREDL, consultancy firm shall submit a draft DPR of solar park for the review by KREDL. On the written receipt of final go ahead from KREDL, consultancy firm shall submit its final DPR against the scope of work mentioned in RFP.

Deliverables	Timeline(From the date of execution of
	contract agreement)
Draft Feasibility Report	Within 4 weeks
Feasibility Report	Within 2 weeks after receipt of written comments on the draft feasibility report
Draft DPR	Within 4 weeks from date of acceptance and approval of feasibility report
Final DPR	Within 2 weeks after acceptance of Draft DPR by KREDL

#### 5.0 Completion period /Time Schedule

The total work shall be completed within 12 weeks from the date of signing of contract agreement

#### 6.0 Penalty for the Delay in completion / Liquidated damages:

- 6.1 The bidder shall clearly note that time is the essence of the contract. The work described in the RFP "the scope of the work" shall be completed within the stipulated period as per the terms and conditions. However, early completion of the works is highly appreciable.
- 6.2 If the successful bidder fails to complete the work within the stipulated time periods specified in the contract, the KREDL shall without prejudice to its other remedies under the contract, deduct from the contract, price as liquidated damage, a sum equivalent to 0.5% of the contract price for each week of delay, subject to a maximum of 10% of the total contract value. The penalty will be applicable at every stage of deliverables.
- 6.3 The **KREDL** has got every right to terminate the contract without any liability if total penalty crosses 10% of the contract value.
- 6.4 We understand that in the event, the successful bidder /contractor withdraws his offer within the validity period or fails to accept the order for any reason whatsoever, or fails to complete the work in time, then the bid security shall be forfeited by KREDL

and the Bidder shall be black listed for any other such activities in any State Govt. / Govt. of India and Union Territory.

#### 7.0 Extension of time

If bidder requires an extension of time beyond the project completion date (plus any additional period to which the bidder is entitled to on payment of liquidated damages) for reason which are beyond his control, bidder shall apply in writing for extension on occurrence of hindrance but not after the stipulated project completion date. The authorized representative of KREDL shall extend the project completion date if he is satisfied that the delay in performance of bidder's obligation is due to reasons beyond his control. If the "extension of time" is allowed due to unavoidable reasons and condition and under Force Majeure the penalty will not be applicable.

#### 8.0 Submission of Deliverables

The deliverables shall be submitted in two copies neatly bound in standard format as approved by the KREDL and as required by MNRE along with soft copies.

#### 9.0 Duration of the Contract

The total duration of the assignment shall be for a period of 12 weeks excluding bid process and evaluation report from the date of execution of the Contract, whereas task specific timelines shall be followed as per clause 4. As per the scope of work and any requirement made by MNRE as per the solar park guidelines, the consultant will have to complete the desired task within the timelines given. KREDL has rights to extend the time as per the clause7 due to unavoidable reasons.

#### 10.0 Information to participant regarding the procedure for submission of proposal

- **Description of Bid Process** Government of Karnataka vide Notification No. IDD 65 ITS 2014 dated 12-Jun-2016 initially had identified and issued a panel of pre-qualified Transaction Advisors to assist the sponsoring authorities concerned with identifying the projects for a period of three years, that was subsequently extended for one year. Now the list of panel of Transaction Advisors has been updated afresh and their details are given at the Annexure vide notification no: IDD 1 TS 2019,dated:10.10.2019 and its amendments . The government has prequalified the firms which are mentioned in the Annexures whom it has accessed are most suitable for providing the address.
- The proposal from the selected panel member should provide a detailed description of the resources that will be applied to the said assignment, especially adequately experienced personnel, capable of and devoted to the successful accomplishment of work to be performed under the contract. The panel member must agree to assign specific individuals to the key positions and that, once assigned to work under this contract, key personnel shall not be removed or replaced without written notice to the Authority. If key personnel are not available for work under this contract for a continuous period exceeding thirty (30) calendar days, or are expected to devote substantially less effort to the work than initially anticipated, the panel member shall immediately notify the Sponsoring Authority, and shall, subject to the concurrence of the Sponsoring Authority, replace such personnel with personnel of substantially equal ability and qualifications.

#### 11.0 Eligibility Criteria:

The panel members who are already pre-qualified as capable of providing transaction services as per GoK notification no: IDD 1 TS 2019, dated 10.10.2019 and its amendments are eligible to submit the financial bid. Again, Technical offer and **Technical evaluation is not required**. It is expected that appointment will be on the basis of **financial evaluation**.

#### **12.0** Bid Security:

- I. The Bidder shall furnish, as part of its Proposal, a **Bid Security of INR 50,000** (Indian Rupee Fifty Thousand) in the form of DD in favor of Managing Director, Karnataka Renewable Energy Development Limited payable at Bengaluru.
- II. Any Proposal, not accompanied by the Bid Security, shall be treated as nonresponsive and will be summarily rejected.
- III. KREDL reserves the right to cancel the bid process or reject all/any bid(s) without assigning any reason thereof and will bear no liability whatsoever consequent upon such a decision.
- IV. The bid security instrument should be initially valid for 90 days from the date of opening of the proposal.
- V. The Bidder, by submitting its proposal pursuant to this RFP, shall be deemed to have acknowledged that, without prejudice to any other right of the KREDL or remedy hereunder or in law or otherwise, the Bid Security shall be forfeited and appropriated by KREDL under the following conditions:
  - If a Bidder withdraws its Proposal during the period of its validity and as extended by the Bidder from time to time; or
  - o In the case of a Bidder being selected, the Selected Bidder fails to sign the agreement.
- VI. The Bid Security will be returned to the unsuccessful bidders within thirty (30) days from the date of letter of award to the successful Bidder.

#### 13.0 Performance Security:

The successful bidder has to submit Performance Security in the form of BG with the acceptance of order within four (4) working days and it should be valid for 6 months. The Performance Security shall be 10% of the value of ward of contract. The Performance Security will be returned within ninety (90) days from the expiry of the consultancy engagement, on satisfactory completion. However, in case of time extension the PBG has to be extended by the firm before 15 days from the date of expiry.

#### **14.0** Technical and Financial Bidding Parameters:

- I. The firm shall be in the list, empaneled by GoK vide notification no: IDD 1 TS 2019, dated:10.10.2019 and its amendments.
- II. The firm shall be a single bidding entity.

- III. The bidders may, with the prior written approval of KREDL, substitute any team member with an alternate CV, either equivalent to or stronger than the original team member.
- IV. The Firm must submit the following
  - Net worth of the previous 3 years (FY 2020-21, 2021-22 and 2022-23).
  - The Bidder shall submit audited annual reports for FY 2020-21,2021-22 and 2022-23
  - The experience list shall include only the works executed by bidder himself.
  - **Conflict of Interest** The participant shall give undertaking that they/their affiliates will not bid for the same project as per clause No. 10 and 11 of GoK notification No. IDD 1 ITS 2019, dated: 10.10.2019 and its amendments.
  - The participant shall submit an undertaking that they will follow all the terms and conditions mentioned in the GoK notification and related documents.

#### 15.0 Team Composition: List of key positions

The bidders as on date of Bid submission, must have adequate qualified and experience personnel in their team

Sl.No	Designation/Role	Minimum Basic	Area of Expertise/Past
		Qualification	Experience
1	Team Leader	B.E/B.Tech/M.E/M.Techwith MBA from reputed institutions	Min 15 years+ experience in consultancy/relevant industry out of which minimum 6 years association and experience in Consultancy of large Solar Energy Park & Projects of large scale >=10,000 MW in India.
2	Civil Engineer	B.E/B.Tech/M.E/M.Tech	Min 7-10 years of Experience designing large green field infrastructure projects. Experience in design and engineering of Solar projects of Cumulative capacity of at least 500 MW is must.
3	Electrical Engineering	BE/B.Tech/ME/M Tech (Electrical)	Min 7-10 years of Experience in designing & engineering of Solar projects of Cumulative capacity of at least 500 MW is must. Knowledge of Power system design,(AC/DC), HT/LT supply with protection is must.
4	Power evacuation and grid Expert	B.E/B.Tech/M.E/M.Tech	Min 10+ years of Experience in Indian Power Sector and Transmission/Evacuation Studies for RE
5	Financial & Investment Expert	CA/CMA/ MBA (Fin)	Min 10+ Years of experience in investment analysis, calculation of IRR, developing financial models for RE and power sector projects.

Sl.No	Designation/Role	Minimum Qualification	Basic	Area Experie	of ence	Expertise/Past
				Must be aware of all taxation and cost accounting practices.		

### **16.0 Schedule of Selection Process**

A	Issue of RFP Document	
В	Time and date for submission of application	14.09.2023 on or before (16:00 Hours)  Offline bid complete in all aspects should be addressed to Managing Director, Karnataka Renewable Energy Development Limited (KREDL), Head Office Bangalore #6/13/1, "KREDL Office Building, Nagarbhavi, Bangalore-560072, Karnataka on or before 16:00 hours on 14/09/2023.
D	Time and date for Presentation before KREDL	Details will be intimated to the bidders.
Е	Time and date for opening of the Financial Proposal.	Details will be intimated to the bidders.
F	Validity of Proposal	Minimum 90 calendar days from Proposal submission deadline.
G	Letter of Award (LOA)	KREDL will issue LOA to successful bidder.
Н	Signing of Contract Agreement	The Selected bidder shall execute the Contract Agreement within 7 days from the date of letter of award.

The submission of bids and opening of the bids will be at KREDL office, Bengaluru.