

REC Project Development and Consultancy Limited

(A Government of India Enterprise)

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Request for Proposal

For

Composite EPC for setting up of Grid Connected 1MW_{AC} Ground Mounted Solar PV plant with arrangement of Land and STU Connectivity

Tender No.: RECDPCL/RE/Solar/1MW/01

Dated: 09-Dec-2024



TABLE OF CONTENTS

DESCRIPTION	PAGE NO.
SECTION - I : Invitation for Bids (IFB)	IFB: 1 - 9
SECTION - II : Instructions to Bidders (ITB)	ITB: 1 - 29
SECTION - III : Bid Data Sheets (BDS)	BDS: 1 – 8
SECTION - IV : General Conditions of Contract (GCC)	GCC: 1 – 45
SECTION - V : Special Conditions of Contract (SCC)	SCC: 1 - 9
SECTION - VI : Sample Forms & Formats	SFF: 1 - 57
SECTION - VII : Scope of Work & Technical Specifications	TS 1-138
SECTION - VIII : Schedule of Rates (SOR)/ Price Schedule (PS)/ Format for Price Bid	SOR: 1 –3
Price bid formats	1-5

Composite EPC for setting up of Grid
Connected 1MWAC Ground
Mounted Solar PV plant with arrangement
of Land and STU Connectivity



DISCLAIMER

- 1. Though adequate care has been taken while preparing the tender document, the bidder(s) shall satisfy themselves that the document is complete in all respect. Intimation regarding any discrepancy shall be given to the office of Employer immediately. If no intimation is received from any bidder within 10 (Ten) days from the date of issuance of Tender documents, it shall be considered that the document is complete in all respect and has been received/ acknowledged by the bidder(s).
- 2. REC Power Development Corporation of India Ltd (RECPDCL) reserves the right to modify, amend or supplement this document.
- 3. While this tender document has been prepared in good faith, neither RECPDCL nor their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this document, even if any loss or damage is caused by any act or omission on their part.
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Place: Gurugram, Date: 09-Dec-2024



SECTION - I

INVITATION FOR BIDS (IFB)



(DOMESTIC COMPETITIVE BIDDING)

(SINGLE STAGE TWO ENVELOPE BIDDING FOLLOWED BY E-REVERSE AUCTION) UNDER E-TENDERING

INVITATION FOR BIDS (IFB) FOR

COMPOSITE EPC FOR SETTING UP OF GRID CONNECTED 1 MW GROUND MOUNTED SOLAR PV
PLANT WITH ARRANGEMENT OF LAND AND STU CONNECTIVITY

Composite EPC for setting up of Grid Connected 1MWAC Ground Mounted Solar PV plant with arrangement of Land and STU Connectivity

Tender No.
RECPDCL/RE/Solar/1MW/01 dated
09-Dec-2024

IFB Page 2 of 9

Signature of Bidder



1. INTRODUCTION

- 1.1. REC Power Development and Consultancy Limited (RECPDCL), is a wholly owned subsidiary of REC Limited, a "Maharatna" Enterprise under the Ministry of Power, Government of India. The existing key services offered by RECPDCL include coordination of bid processes for Inter-State and Intra-State transmission projects, coordination of bid processes for flexibility in generation schemes, engagement as Project Implementation Agency (PIA) for Smart Metering projects, PIA services for Distribution Infrastructure projects, Project Management Consultancy (PMC) for various Government of India Schemes such as RDSS, DDUGJY, IPDS, and Saubhagya. Beyond the core services, RECPDCL is gearing for venturing into the Renewable Energy sector through diverse business models. Hence RECPDCL is actively considering investment in brownfield renewable energy projects.
- 1.2. The selection of the Contractor for the "Design, Engineering, Supply, Construction, Erection, Testing & Commissioning of 1 MW (AC) Ground mounted Solar PV Project at Haryana including 5 Years Plant O&M" will be carried out by RECPDCL incorporated under the Companies Act, 2013, having its Registered Office at Core-4, SCOPE complex, 7, Lodhi Road, New Delhi-110003 (hereinafter referred to as 'RECPDCL' or EMPLOYER or OWNER). For the purpose of all procurement activities related to the said works, RECPDCL shall be referred to as 'RECPDCL or Employer or Owner'.
- 1.3. RECPDCL, therefore, invites bids from eligible bidders to participate in the tender for Design, Engineering, Supply, Construction, Erection, Testing & Commissioning of 1 MW (AC) Ground mounted Solar PV Project with land and evacuation anywhere in Haryana, having 5 Years Plant O&M as per the aforementioned details.
- 2. The complete Bidding Documents are available at REC/e-wizard portal https://rec.ewizard.in, as well as on RECPDCL's website https://www.recpdcl.in and REC website https://www.recindia.nic.in. However, for the purpose of participation, the official copy of the bidding documents shall only be downloaded from RECPDCL's e-tendering portal at https://rec.ewizard.in, as per the provisions available therein. Accordingly, the online bid also has to be uploaded by the respective bidders at https://rec.ewizard.in only & no other mode of participation is permitted for this tender document other than REC's e-wizard portal.
- 3. Interested bidders have to necessarily register themselves on the portal https://rec.ewizard.in to participate in the bidding under this invitation for bids. It shall be the sole responsibility of the interested bidders to get themselves registered at the aforesaid portal for which they are required to complete the registration formalities. All required documents and formalities for registering on E-Wizard are mentioned in the subsequent bidding documents. They may obtain further information regarding this IFB from the corporate office of RECPDCL at the address given on the Bid Information Sheet from 10:00 hours to 17:00 hours on all working days till the last date of the Bid Submission. For proper uploading of the bids on the portal namely https://rec.ewizard.in (hereinafter referred to as the 'portal'), it shall be the sole responsibility of the bidders to apprise themselves adequately regarding all the relevant procedures and provisions as detailed in the portal as well as by contacting REC/e-wizard portal https://rec.ewizard.in, as and when required, for which contact details are also mentioned on the Bid Information Sheet. The EMPLOYER in no case shall be responsible for any issues related to timely or properly uploading/ submission of the bid in accordance with the relevant provisions of Section II ITB of the Bidding Documents.



- 4. A Single Stage Two Envelope Bidding Procedure followed by e-Reverse Auction will be adopted and will be processed as detailed in the Bidding Documents. Bidding will be conducted through the competitive bidding procedures as per the provisions of ITB/ BDS and the contract shall be executed as per the provisions of the Contract. It shall be noted that the respective rights of the Employer and the Bidder/ Contractor shall be governed by this Bidding Documents and Contract signed between the Owner and the Contractor..
- 5. Bidder shall submit bid proposal along with non-refundable Tender Processing Fees, Earnest Money Deposit (EMD) if applicable/ Bid Securing Declaration complete in all respect as per the Bid Information Sheet. Techno-Commercial bids will be opened as per the Bid Information Sheet in offline/ online presence of authorised representatives of bidders who wish to be present offline/ online. Bid proposals received without the prescribed Tender Processing Fees and Earnest Money Deposit (EMD, if applicable) or Bid Securing Declaration will be rejected. In the event of any date indicated is a declared Holiday, the next working day shall become operative for the respective purpose mentioned herein.
- 6. Tender documents which include Eligibility Criteria, Technical Specifications, various Conditions of Contract, Formats etc. can be downloaded from REC/e-wizard portal https://rec.ewizard.in, as well as on at https://www.recpdcl.in .lt is mandatory to download official copy of Tender Document from REC/e-wizard Portal to participate in the Tender. Any amendment(s)/ corrigendum(s)/ clarification(s) with respect to this Tender shall be uploaded on REC/e-wizard site. The Bidder should regularly check for any Amendment(s)/ Corrigendum(s)/ Clarification(s) on the above mentioned REC/e-wizard site. The same may also be uploaded on RECPDCL website http://www.recpdcl.in also. However, in case of any discrepancy, the information available on e-wizard portal shall prevail.
- 7. EMD/Bid Securing Declaration shall be enclosed in a sealed envelope and shall be submitted in the office of EMPLOYER (offline) whose mailing address is mentioned in the Bid Information Sheet
- 8. Performance Securities as per this tender document shall be furnished by the successful bidder after issuance of Notification of Award (NOA)/ Letter of Intent (LOI)/ Letter of Award (LOA) by the Owner
- 9. The detailed Qualifying Requirements (QR) are given in the section, "Annexure to BDS".
- 10. The EMPLOYER shall conduct e-Reverse Auction (e-RA), as per provisions of Instructions to Bidders (ITB) of Tender documents.
- 11. EMPLOYER/ Owner reserves the right to cancel/ withdraw this invitation for bids without assigning any reason and shall bear no liability whatsoever consequent upon such a decision.

INTERPRETATIONS

- 1. Words comprising the singular shall include the plural & vice versa.
- 2. An applicable law shall be construed as reference to such applicable law including its amendments or re-enactments from time to time.
- 3. A time of day shall save as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time.
- 4. Different parts of this Tender Document are to be taken as mutually explanatory and supplementary to each other and if there is any differences between or among the parts of this Tender Document, they shall be interpreted in a harmonious manner so as to give effect to each part.



The table of contents and any headings or sub headings in the Tender Document has been inserted for case of reference only & shall not affect the interpretation of this document.

BID INFORMATION SHEET

The brief details of the tender are as under:

I. Land Related Works Arrangement of Government/private Land (approx. 5 Acres) in NAME OF WORK/BRIEF the state of Haryana on leasehold basis near State SCOPE OFWORK/JOB (A) Transmission Utility (STU) substation. The distance from proposed land to State Transmission Utility (STU) substation shall be maximum distance of 10 km. The lease period shall be a minimum of 29 years 11 months. Necessary approach till State Transmission Utility (STU) substation by self or through State machinery. Topography Survey for Land Parcels and any cutting / Filling with 95% compaction as per standard Proctor density test, to maintain an average slope of 10% for Solar Project Land for installation of Module Mounting Structure (MMS). The slope of land would preferably be in one direction for at least 100m length in N-S Direction. Fencing of the offered Land including entry / exit gate and security cabin for Solar PV Project. RoW of Transmission line from Project site to State Transmission Utility (STU) substation. II. EPC Related Works Design & engineering, procurement & supply of equipment and materials, testing at manufacturers works, multi – level inspections, packing and forwarding, supply, receipt, unloading and storage at site, associated civil works, services, permits, licenses, installation and incidentals, insurance at all stages, erection, testing and commissioning of 1 MW(AC) Grid connected ground mounted Solar PV Project including Power Evacuation and STUS transmission line and performance demonstration with associated equipment and materials on turnkey basis along with 5 (Five) years comprehensive operation and maintenance from the date of commissioning or Operational Acceptance, whichever is later. 1.1 Solar Modules, Module mounting structures and fasteners. Installation, Erection, Testing and Commissioning of Modules along with demonstration of the performance parameters.

Composite EPC for setting up of Grid	
Connected 1MWAC Ground	
Mounted Solar PV plant with arrangement	
of Land and STU Connectivity	



- **1.2** All power conditioning systems including junction boxes, Inverters/ PCU, DC and AC circuit breaker(s).
- 1.3 All associated electrical works and equipment required for interfacing line/ cable (i.e., transformer(s) power and auxiliary, breakers, isolators, lightning arrestor(s), LT/other panels, protection system, cables, metering etc., but not limited to) as per technical specifications.
- 1.4 Design, supply, erection, testing & commissioning defined in scope of work/ TS as per project requirement and associated switchgear equipment and metering equipment as per technical specification and state regulations.
- 1.5 All associated civil works, including design and Engineering, for: Earthwork for Site grading, cutting, filling, levelling & compacting, internal Roads, Storm water drainage in the requisite project land as required for development of this Solar PV Power Plant
- 1.6 Construction of Passage for Cleaning of Solar PV Project
- 1.7 Construction of rainwater drainage, if required
- 1.8 Setting up of a comprehensive Fire Protection system as per the Hazardous area classification for the site
- 1.9 Supply of mandatory spares & special tools and tackles
- **1.10**Demonstration of performance of the plant as per the requirement specified in the bidding documents.
- 1.11Comprehensive operation & maintenance of the Solar PV Projectfor 5 (Five) years as mentioned in detailed scope of work from the date of commissioning or Operational Acceptance, whichever is later, as detailed in technical specification, including supply and storage of all spare parts, consumables, repairs/replacement of any defective equipment etc.
- 1.12Obtaining all associated statutory and regulatory compliances and approvals for successful construction, commissioning and operation of plant.
- **1.13**The detailed scope of work is given in Section VII: Scope of Work, specifications and Drawings of this bidding documents.
- **1.14**Geotech Investigation for Grid Substation and Transmission System only as required for Design of Foundations.
- **1.15**Arrangement of Power transmission line connectivity with State Transmission Utility (STU) substation in location.
- **1.16**Design, Engineering, Supply, Erection, Testing & Commissioning of:
 - a. Pooling substation (33/11 kV or as per quoted capacity) with Tie Transformers (33/11 kV -suitable quantity and rating in line with CEA standard specifications) and associated SAS and Protection.
 - b. Pooling Switchgear for quoted capacity.



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		c. Associated Civil work for substation including Control Room	
		Building and Pooling switchgear building	
		1.17Design and Construction of High Voltage (HV) Transmission Line	
		from Pooling substation till State Transmission Utility (STU)	
		substation as per technical specifications and relevant standards including arranging for the "Right of Way" of transmission line.	
		1.18Design and construction of terminal bay (AIS/GIS as applicable) at	
		State Transmission Utility (STU) substation end.	
		1.19Telemetry system for data communication as per specifications.1.20Installation of Common Power Plant Controller (Main and Sub-PPCs) and Grid Compliance Study for Solar plant capacity associated with above Pooling Substation.	
		1.21 Supply and Installation of various Monitoring associated with Tie Transformers.	
		1.22Supply of mandatory spares.	
		1.23 O&M of Pooling substation and associated equipment, High Voltage (HV) Transmission Line and terminal bay at State Transmission Utility (STU) substation end for a period of 5 years	
		from the date of Project Commissioning.	
(B)	TENDER NO. & DATE	RECPDCL/RE/Solar/1MW/01 dated 09-Dec-2024	
(C)	SOURCE OF FUNDS	Owner as defined in the Bid Data Sheets (BDS) intends to finance the package through domestic funding and own resources.	
(D)	TYPE OF TENDER	"Single Stage Two Envelope "online Bidding system followed by e- Reverse Auction.	
(E)	BIDDERS ELIGIBLE FOR BIDDING	It's a "Domestic Competitive Bidding" and hence this bid is open only for bidders registered within the Owner's country.	
(F)	COMPLETION/ CONTRACT PERIOD	As mentioned in Special Conditions of Contract (SCC).	
(G)	COST OF BIDDING DOCUMENTS	Free of cost	
(H)	TENDER PROCESSING FEE	Rs. 5000/- +GST	
(1)	EARNEST MONEY DEPOSIT	INR 5,10,000/- (Indian Rupees Five Lakh Ten Thousand only).	
. ,	(EMD)	Validity of 180 days from the technical bid opening date	
(1)	CONTRACT PERFORMANCE SECURITY	10% of the total Contract Value as mentioned in SCC	
(K)	DATE, TIME & VENUE OF	Pre-Bid Meeting 15:30 HRS (IST) on 19-Dec-2024	
	PRE- BID MEETING & SITE VISIT	Through online and link shall be uploaded in the RECPDCL website.	
(L)	OFFLINE & ONLINE BID-	Online :03-Jan-2025 up to 15:30 HRS (IST)	
	SUBMISSION DEADLINE	Offline :08-Jan-2025 up to 15:30 HRS (IST)	
posite	EPC for setting up of Grid	Tender No.	

Composite EPC for setting up of Grid Connected 1MWAC Ground Mounted Solar PV plant with arrangement of Land and STU Connectivity	Tender No. RECPDCL/RE/Solar/1MW/01 dated 09-Dec-2024	IFB Page 7 of 9	Signature of Bidder	
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(M)	OFFLINE & ONLINE BID OPENING	03-Jan-2025, 1600 HRS onwards
(N)	FINANCIAL BID OPENING	To be intimated subsequent to the shortlisting of Techno Commercial Bids
(O)	QUERIES CONTACT DETAILS	Shri Krishna Chaitanya, Manager, REC Power Development and Consultancy Limited, Plot Number 1-4, REC World Headquarters, D-Block, Sector-29, Gurugram — 122001, Haryana, India Website: www.recpdcl.in E mail: rediv@recpdcl.in Phone: 9940461546
(Q)	CONTACT DETAILS OF E- wizard	E –wizard: 1. Help desk No – 011-49606060, email - eprochelpdesk.101@gmail.com 2. Sh. Birendra- 8448288988, email - eprochelpdesk.21@gmail.com

- 1. Bids must be submitted strictly in accordance with Clause no. 11 of ITB depending upon Type of Tender as mentioned at Clause no. (D) of Bid Information Sheet. The Invitation for Bid(IFB) is an integral and inseparable part of the Tender document.
- 2. Bidder(s) are advised to bid strictly as per terms and conditions of the tender documents and not to stipulate any deviations/ exceptions.
- 3. Any bidder, who meets the Qualifying Requirement and wishes to quote against this tender, may download the complete bidding document along with its amendment(s) if any from e-wizard Portal of REC (https://rec.ewizard.in) and submit their Bid complete in all respect as per terms & conditions of Tender Document on or before the due date of bid submission.
- 4. No Manual / Hard Copy of the Bid shall be acceptable.
- 5. Clarification(s)/ Corrigendum(s) if any shall also be available on above referred websites.
- 6. Owner will release NOA/ LOI/ LOA/ CA for LSTK (Lump Sum Turn Key)/ EPC (Engineering, Procurement & Commissioning) to the successful bidder. The NOA/ LOI/ LOA/ CA for LSTK/ EPC job shall be awarded in following respective parts as mentioned briefly below:
 - i. First Contract (Turnkey Land & EPC (Supply & Service)): For providing land along with connectivity at STU, Ex Works Supply of materials including mandatory spares and any other supplies specified in the Tender Documents under the scope of Supply comprising of all services i.e., including Transportation and Insurance of all Equipment's till site, Unloading of PV Modules at Site Supplied by the Owner, Storage, Handling at Site, Civil Works, Design, engineering, Erection, Installation, Testing and Commissioning of complete Solar PV Power Plant including Performance Testing in respect of all the Equipment's supplied under the scope of Supply and any other services specified in the Contract Documents.

Composite EPC for setting up of Grid Connected 1MWAC Ground Mounted Solar PV plant with arrangement of Land and STU Connectivity Tender No. RECPDCL/RE/Solar/1MW/01 dated 09-Dec-2024	IFB Page 8 of 9	Signature of Bidder
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- ii. Second Contract (O&M Part): For providing Comprehensive operation & maintenance of the Solar PV plant for 5 (Five) years from the date of Operational Acceptance, as detailed in technical specification including supply and storage of all spare parts, consumables, repairs/replacement of any defective equipment etc.
- 7. However, the above-mentioned contract award methodology may be modified/ changed based on specific project requirements and upon sole discretion of Owner.