

## **NOTICE**

### **Invitation for Bids (IFB) for set up o CO2 closed brayton cycle-based energy storage System at NTPC Kudgi**

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The NTPC Limited, a premier power utility company in India invites bid proposal for Set up of CO2 Closed Brayton Cycle-based Energy Storage System at NTPC Kudgi located at NTPC Kudgi STPP, District-Bijapur, Karnataka

The submission of Bids shall be as per the following details :

Issue of IFB : 4.10.2024 (Tender ID : 2024\_NTPC\_91006\_1 on ICB basis)

A copy of IFB document in enclosed herewith for ready reference. The Complete set of Bidding Documents may be downloaded from Portal <https://eprocurentpc.nic.in/>

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**NTPC LIMITED**  
*(A Government of India Enterprise)*

**CORPORATE CONTRACTS, NOIDA**

**INVITATION FOR BIDS (IFB)**

**FOR**

**Setup of CO2 Closed Brayton Cycle-based Energy Storage System at NTPC Kudgi  
Located at NTPC Kudgi STPP, District-Bijapur, Karnataka, India**

**(International Competitive Bidding)**

**IFB No.:** 2024\_NTPC\_91006\_1

**Bidding Document No.:** CS-9573-170-9

**Date:**04.10.2024

**A.** NTPC invites on-line bids at Government e-procurement portal of NIC (GePNIC) at website- <https://eprocurementpc.nic.in/> on **Single Stage Two Envelope International Competitive Bidding Basis (i.e. Envelope-I: Techno-Commercial Bid and Envelope-II: Price Bid)** from eligible Bidders for aforesaid package, as per the scope of work briefly mentioned hereinafter.

**B. BRIEF SCOPE OF WORK**

The contract package is for Design, Engineering, Fabrication, Packing, Forwarding, Supply, Transportation and handling, Storage, Construction, Erection, Commissioning, Testing, PG Test, Training and O&M of the Project of CO2 based Closed Brayton Cycle Energy Storage System at NTPC Kudgi in line with the specifications provided in technical document along with detailed engineering and design.

**C.** NTPC intends to finance the aforesaid Package through External Commercial Borrowings (ECB)/Own Resources.

**D.** The Bidding Schedule\* for the Tender is as under:

Issue of IFB	04.10.2024
Start of Documents download Date	04.10.2024
Date for Pre-Bid conference	15.10.2024
Last date for receipt of queries from bidders (if any)**	17.10.2024 upto 17:00 Hrs (IST)
Bid receipt date & time for Envelope-I (Techno-Commercial) & Envelope-II (Price) bid	11.11.2024 upto 13:00 Hrs (IST)
Bid Opening Date & Time for Envelope-I (Techno-Commercial) bid	12.11.2024 at 12:00 Hrs (IST)
Cost of Bidding Document	Rs. 22,500 (Rupees Twenty-Two Thousand Five Hundred only) for Indian Bidders or USD 500 (US Dollar

	Five Hundred only) for Foreign Bidders.
Bid Opening Date & Time for Envelope-II (Price) bid	Shall be intimated after opening of Envelope-I (Techno-Commercial) Bids.

**\*Note: Bidders are advised to visit the GePNIC (e-tender) portal of NTPC for updated bidding schedule of the Tender.**

\*\*It is to be noted that "No Queries from Bidders, whatsoever, shall be entertained by the Employer beyond the last date of receipt of Queries as specified at GePNIC portal of NTPC".

- E.** All bids must be accompanied by Bid Security for an amount of **INR 50,000,000/-** (Indian Rupees fifty Million only) or **USD 5,96,000/-** (Five hundred ninety-six thousand US Dollars) in the form as stipulated in the Bidding Documents.

**ANY BID NOT ACCOMPANIED BY AN ACCEPTABLE BID SECURITY IN A SEPARATE SEALED ENVELOPE SHALL BE REJECTED BY THE EMPLOYER AS BEING NON-RESPONSIVE. IN CASE, THE BID SECURITY IS SUBMITTED THROUGH ELECTRONIC FUND TRANSFER (EFT), BIDDER TO SUBMIT THE PROOF OF E-PAYMENT OF BID SECURITY EITHER IN SEPARATE SEALED ENVELOPE OR IN THE E-TENDERING PORTAL.**

- F.** A complete set of Bidding Documents may be downloaded by any interested Bidder from the e-Tender Portal as per specified schedule. The tender is invited under e-tendering process. The bidders can enroll themselves on the website <https://eprocurementpc.nic.in/>. The use of Digital Signature Certificate (DSC) Class-3 key is mandatory for e-tendering activities. Accordingly, bidders should have Digital Signature Certificate (DSC) key of Class 3 to participate in e-tendering. Bidders, if required, can obtain DSC Class-3 key from agencies authorized by Govt. of India. The e-Tender Portal also has the user manuals with detailed guidelines on enrolment and participation in the bidding process.

**No hard copy of Bidding Documents shall be issued. Bids shall be submitted ONLY at the e-Tender Portal i.e. <https://eprocurementpc.nic.in/>**

- G. Qualifying Requirements for Bidders (QR):**

Qualifying Requirement (QR) for subject package is attached as **Appendix-1 to IFB**

- H.** Both Local (Class-I & Class-II) and Non-Local suppliers are eligible to participate in this tender, as defined in the bidding documents/ Public Procurement (Preference to Make in India), Order 2017 and its subsequent amendments/ revisions issued by DPIIT. The bidders may apprise themselves of the relevant provisions of bidding documents in this regard before submission of their bids.
- I.** Any 'Bidder from a country which shares a land border with India', as specified in the Bidding Documents, will be eligible to bid in this tender only if bidder is registered with the Competent Authority as mentioned in the Bidding Documents.

Further, any bidder (including bidder from India) having specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India, will be eligible to bid only if the bidder is registered with the same competent authority.

However, the said requirement of registration will not apply to bidders from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects.

- J. The package is a tender for works contract. Accordingly, the MSE benefits are not applicable.
- K. Transfer of Bidding Documents by one intending Bidder to another is not permissible.
- L. Downloading/Issuance of Bidding Documents and /or submission of Bid shall not construe that such bidder is considered to be qualified.
- M. NTPC reserves the right to reject any or all bids or cancel/withdraw the Invitation for Bids (under subject IFB) without assigning any reason whatsoever and in such case no bidder/intending bidder shall have any claim arising out of such action.

**N. Address for Communication:**

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Websites: <https://eprocurementpc.nic.in/> or [www.ntpctender.ntpc.co.in](http://www.ntpctender.ntpc.co.in) or [www.ntpc.co.in](http://www.ntpc.co.in)

**O. Registered Office**

NTPC Limited  
NTPC Bhawan, SCOPE Complex,  
7, Institutional Area, Lodi Road,  
New Delhi – 110003

Corporate Identification Number: L40101DL1975GOI007966,

Website: [www.ntpc.co.in](http://www.ntpc.co.in)

## Qualifying Requirements

### Setup of CO<sub>2</sub> Closed Brayton Cycle Energy Storage System at NTPC Kudgi

**1.0.0** In addition to the requirements stipulated under section Instruction to Bidder (ITB), the bidder should also meet the qualifying requirements stipulated hereunder:

#### **1.1.0 TECHNICAL CRITERIA**

##### **1.1.1 Route-1:**

The bidder (herein after also called the Technology provider) should be the owner of the technology for 'Energy storage based on closed thermodynamic cycle using CO<sub>2</sub> as working fluid' and based on which at least one (01) number of plant with minimum capacity of 1 MW (power) and 1 MWhr (energy) has been commissioned, prior to the date of techno-commercial bid opening.

##### **1.1.2 Route-2:**

The bidder should have supplied, erected/supervised erection, commissioned/ supervised commissioning in the area of power/ energy storage/ chemical plant/ process plant/ turbine/ rotary compressors/oil and gas during the last fifteen (15) years reckoned as on the date of Techno-Commercial Bid Opening, with a cumulative value of such project(s) being ₹2540 Million (Rupees Two Thousand five hundred and forty million) with atleast one project of value more than 1000 Million (Rupees one thousand Million only) are in successful operation for six months and other individual project(s) of value not less than ₹ 400 Million (Rupees Four Hundred Million Only) should have been successfully commissioned prior to the date of techno-commercial bid opening.

and

The bidder should have valid technology license agreement/ agreement for right to use of technology with a technology provider who meets the Criteria as mentioned in Clause 1.1.1 above.

#### **Notes for Clause 1.1.0.**

- a. For meeting qualifying requirement under clause 1.1.2, bidder can also have a valid Technology License Agreement / Agreement for Right to Use of Technology with holding company or subsidiary company of the Technology Provider (hereinafter referred to as Technology Provider's Group Company-TPGC) provided that such TPGC has the right to use the technology of the Technology Provider and the right to enter into Technology License Agreement/ Agreement for Right to Use of Technology, with the bidder.
- b. A bidder, meeting qualifying requirement under clause 1.1.2 can tie up with only one Technology Provider. In case a bidder submits bid(s) with multiple Technology Providers, all such bids shall be rejected. **A Technology Provider can have Technology License Agreement / Agreement for Right to Use of Technology with multiple bidders meeting the qualifying requirement under clause 1.1.2.**
- c. A bidder, meeting qualifying requirement under clause 1.1.2 shall be required to produce the Technology License agreement/ Agreement for Right to Use of Technology with Technology provider valid for at least four years from the date of Techno-commercial bid opening or till the end of defect liability period of the contract or the completion of O&M period, whichever is later. Further, such Bidder shall also be required to furnish along with bid, a letter of undertaking for technical support from the Technology owner as per the format enclosed in the bidding documents.
- d. The Bidder shall also be considered qualified in case the award for execution of the reference works has been received by the Bidder either directly from the owner of the plant or any other intermediary organization. However, a certificate from the owner of the plant shall be furnished by the Bidder along with the Techno-Commercial bid for the successful operation / commissioning criterion as specified at clause 1.1.2. If the Value of the reference works indicated at clause 1.1.0 is in foreign currency, SBI Bill

Selling exchange rate as on the date of award of the reference work shall be considered. In case the exchange rate as on the date of award is not available, the exchange rate as on the next available day shall be considered.

- e. In case bidder is a Technology Provider and meeting qualifying requirement under clause 1.1.1, such bidder cannot have Technology License Agreement with other bidders meeting qualifying requirement under clause 1.1.2.

## **2.0 FINANCIAL CRITERIA**

**2.1** The average annual turnover of the Bidder, in the preceding three (3) financial years as on the date of Techno-Commercial bid opening, should not be less than ₹2124 Million (Rupees Two Thousand One Hundred and Twenty Four Million Only) or in equivalent foreign currency.

**2.2** In case a Bidder does not satisfy the average annual turnover criteria, stipulated above on its own, its Holding Company would be required to meet the stipulated turnover requirements as above, provided that the Net Worth of such Holding Company as on the last day of the preceding financial year is at least equal to or more than the paid-up share capital of the Holding Company. In such an event, the Bidder would be required to furnish along with its Techno-Commercial bid, a Letter of Undertaking from the Holding Company, supported by the Holding Company's Board Resolution, as per the format enclosed in the bid documents, pledging unconditional and irrevocable financial support for the execution of the Contract by the Bidder in case of award.

**2.3** Net worth should not be less than 100% (hundred percent) of the bidder's paid up share capital as on the last day of the preceding financial year. In case the Bidder does not meet the Net worth criteria on its own, it can meet the requirement of Net worth based on the strength of its Subsidiary (ies) and/or Holding Company and/or Subsidiaries of its Holding companies wherever applicable. In such a case, however the Net worth of the Bidder and its Subsidiary(ies) and/or Holding Company and/or Subsidiary(ies) of the Holding Company, in combined manner should not be less than 100% (hundred percent) of their total paid up share capital. However individually, their Net worth should not be less than 75% (seventy five percent) of their respective paid up share capitals.

Net worth in combined manner shall be calculated as follows: Net

$$\text{worth (combined)} = (X1+X2+X3) / (Y1+Y2+Y3) \times 100$$

Where X1, X2, X3 are individual Net worth which should not be less than 75% of the respective paid up share capitals and Y1, Y2, Y3 are individual paid-up share capitals.

**2.4** In case the Bidder is not able to furnish its audited financial statements on standalone entity basis, the unaudited unconsolidated financial statements of the Bidder can be considered acceptable provided the Bidder further furnishes the following documents for substantiation of its qualification:

- (i) Copies of the unaudited unconsolidated financial statements of the Bidder along with copies of the audited consolidated financial statements of its Holding Company.
- (ii) A Certificate from the CEO/CFO of the Holding Company, as per the format enclosed with the bidding documents, stating that the unaudited unconsolidated financial statements form part of the consolidated financial statements of the Holding Company.

In cases where audited results for the last financial year as on the date of Techno Commercial bid opening are not available, the financial results certified by a practicing Chartered Accountant shall be considered acceptable. In case, Bidder is not able to submit the Certificate from a practicing Chartered Accountant certifying its financial parameters, the audited results of three consecutive financial years preceding the last financial year shall be considered for evaluating the financial parameters. Further, a Certificate would be required from the CEO/CFO as per the format enclosed in the bidding documents stating that the financial results of the Company are under audit as on the date of Techno-commercial bid opening and the Certificate from the practicing Chartered Accountant certifying the financial parameters is not available.

### **Notes for Clause 2.0**

- i) Net worth means the sum total of the paid-up share capital and free reserves. Free reserves mean all

reserves credited out of the profits and share premium account but do not include reserves credited out of the revaluation of the assets, write back of depreciation provision and amalgamation. Further any debit balance of Profit and Loss account and miscellaneous expenses to the extent not adjusted or written off, if any, shall be reduced from reserves and surplus.

- ii) Other income shall not be considered for arriving at annual turnover.
- iii) "Holding Company" and "Subsidiary" shall have the meaning ascribed to them as per Companies Act of India.
- iv) For Annual Turnover indicated in foreign currency, SBI Bill Selling exchange rate as on seven (7) days prior to the date of Techno-Commercial bid opening shall be used. In case the exchange rate as on the date of award is not available, the exchange rate as on the next available day shall be considered.