

This NIT is with reference to the Abridged NIT already issued on 13.03.2024 at the NTPC tender portal www.ntpctender.ntpc.co.in

**NTPC LIMITED
(A Government of India Enterprise)
CORPORATE CONTRACTS, NOIDA**

INVITATION FOR BIDS (IFB)

FOR

Setting up a Pilot Project for Thermal Energy Storage System (TESS) Integrated with Thermal Power Plant to supply 15MW(e) additional Power at NTPC DADRI

LOCATED AT

NTPC Dadri, District: Gautam Budh Nagar, State: Uttar Pradesh, India

(International Competitive Bidding)

IFB No.: 2024_NTPC_86126_1

Bidding Document No.: CS-0011-170-2

Date: 17.04.2024

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 scope includes Design, Engineering, Supply, Construction, Erection, Testing & Commissioning works for Thermal Energy Storage system (TESS) Pilot Plant Package of capacity approximately 200 MWh (thermal) integrated with Steam and feed water cycle of thermal power unit to generate additional net power of 15MW(e) for four(04) hours using new set of turbine and generator including associated piping, valve, fitting along with necessary Feed Water pump, Heat Exchanger and other Auxiliaries and associated civil works. O&M including spares and consumables for three (03) years is also included in scope.

The detailed scope of the work is specified in the bidding documents.

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 Abridged IFB	13.03.2024
Bidding Document No	CS-0362-001-2
Start of Documents download Date	17.04.2024
Date for Pre-Bid conference	06.05.2024

Last date for receipt of queries from bidders (if any)**	11.05.2024 upto 17:00 Hrs (IST)
Bid receipt date & time for Envelope-I (Techno-Commercial) & Envelope-II (Price) bid	29.05.2024 upto 14:00 Hrs (IST)
Bid Opening Date & Time for Envelope-I (Techno-Commercial) bid	30.05.2024 at 16:00 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 6,04,960/-** (Six hundred four thousand nine hundred sixty 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://eprocurmentpc.nic.in/> or www.ntpctender.ntpc.co.in or 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

QUALIFYING REQUIREMENTS(QR) FOR
SETTING UP A PILOT PROJECT FOR THERMAL ENERGY STORAGE SYSTEM (TESS)
INTEGRATED WITH THERMAL POWER PLANT TO SUPPLY 15MW(e) ADDITIONAL POWER

AT NTPC DADRI

The Bidder should meet the qualifying requirements of any one of the qualifying routes stipulated under clause 1.1 or 1.2 or 1.3. In addition, the Bidder should also meet the requirements stipulated under clause 2.0 together with the requirements stipulated under section ITB.

1.0 TECHNICAL CRITERIA

1.1 Route-1: Technology Owner for Thermal Energy Storage System (TESS)

- a. The bidder, as on the date of Techno-commercial bid opening, should be a Thermal Energy Storage technology owner, who has designed/ developed and demonstrated a plant/pilot project for Thermal Energy Storage System (TESS), constructed with static type storage media, of minimum discharge capacity of 200KWh(thermal) having a discharging duration of minimum 2 hours to generate superheated steam of minimum temperature of 200⁰ C, charging using steam or waste heat or electricity.

AND

- b. The bidder, as on the date of Techno-commercial bid opening, should be a Thermal Energy Storage technology owner, who has designed/ developed and erected /supervised erection of a plant/pilot project for Thermal Energy Storage System (TESS), constructed with static type storage media, of minimum discharge capacity of 200KWh(thermal) having a discharging duration of minimum 2 hours to generate superheated steam of minimum temperature of 200⁰ C, charging using steam or waste heat.

Note: In case single reference plant/ pilot project meets both the requirements as stipulated at 1.1(a) and 1.1(b), same shall also be accepted.

1.2 Route-2: Experience of Industrial Project Development/Construction

- (a) Bidder should have experience of construction / developing industrial projects, executed in the area of power/power system/ steel/ oil & gas/ petro-chemical/ fertilizer / any other process industry during last ten (10) years reckoned as on the date of Techno Commercial Bid Opening, with a cumulative value of such project(s) being INR 1000 Million (Indian Rupees One Thousand Million Only) or more with individual contract value of such project(s) not less than INR 200 million (Indian Rupees Two Hundred Million Only) . These project(s) should have been commissioned/completed prior to the date of Techno-commercial bid opening.

AND

- (b) The bidder, as on the date of Techno- commercial bid opening, should have a valid Technology License Agreement / Agreement for the Right to Use the Technology with a technology owner who meets the requirement of Clause 1.1 as on date of Techno-Commercial bid opening. The agreement shall be valid till the end of the defect liability period of the contract.

In such case, Bidder shall also be required to furnish a letter of undertaking for technical support from the Technology owner , for successful performance of pilot plant for Thermal Energy Storage System as per the format enclosed in the bidding documents. This letter of technical support should be submitted along with Techno Commercial bid, failing which the Bidder shall be disqualified and its bid shall be rejected.

1.3 Route-3: Consortium Route

Bidder may be a Consortium, comprising of two members and shall collectively meet the following qualification requirements:

- 1.3.1 One of the Consortium members shall be required to necessarily meet the requirements stipulated at clause no 1.1 above.
- 1.3.2 Other consortium member shall be required to necessarily meet the requirements stipulated at clause no.1.2(a).
- 1.3.3 Both the Consortium members shall identify one of the members as the “leader”.
- 1.3.4 Bidding consortium will be required to furnish a legally enforceable Consortium Agreement along with Techno-commercial Bid, holding themselves responsible and liable to NTPC, valid upto the end of three months after the expiry of O&M period under the contract, as per the format enclosed in the bidding documents. The lead partner of the consortium shall be jointly & severally responsible and liable to NTPC to perform all contractual obligations including the contractual obligations of other consortium partner. However, the other partner shall be responsible and liable to NTPC to perform all contractual obligations related to his respective scope. Submission of Consortium Agreement is a mandatory requirement and non-submission may lead to rejection of the bid.

Note for Clause 1.0

- i) The Bidder, or if the Bidder is a consortium, each Consortium member, must be a business organization duly registered under the laws of its country as on date of Techno-commercial bid opening.
- ii) The value of executed works shall be exclusive of applicable tax/GST.
- iii) If the Value of executed works is in foreign currency, SBI bill selling exchange rate as on the date of award of the work shall be used. In case the exchange rate as on date of award of work is not available, the exchange rate as on the next available day shall be used.
- iv) The word “executed” means the Bidder should have commissioned/completed the plant(s) within the specified period even if the contract has been started earlier and/ or is not closed.

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 INR 1290 Million (Indian Rupees One Thousand Two Hundred Ninety Million Only) or in equivalent foreign currency.

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.

Note:

In case the Bidder is a Consortium, both the members of the consortium shall be collectively required to meet the annual turnover criterion. However, the leader of the consortium should meet, on its own, at least 51% of the absolute value(s) of the Financial Criteria mentioned at clause 2.1 above.

- 2.2 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:

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

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.

Note:

In case the bidder is a consortium, the Net worth of both consortium members, in combined manner, should not be less than 100% (hundred percent) of their total paid up share capital as stipulated under the Clause no. 2.2. 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:

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

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

- 2.3 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 means 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, the exchange rate as on seven (7) days prior to the date of Techno-commercial bid opening shall be used.