

## INVITATION FOR BID

**NTPC LIMITED  
(A GOVERNMENT OF INDIA ENTERPRISE)  
RENEWABLE ENERGY – CONTRACTS SERVICES, NOIDA.**

**INVITATION FOR BIDS (IFB)  
FOR  
EPC PACKAGE FOR DEVELOPMENT OF 10MW/40MWh BATTERY ENERGY STORAGE  
SYSTEM (BESS) AT NTPC RAMAGUNDAM**

**(Domestic Competitive Bidding)**

**IFB No.: RE-CS-5747-004(B)-9**

**Date: 13.04.2022**

**Bidding Document No: RE-CS-5747-004(B)-9**

**1.0 NTPC Ltd.** invites online bids from eligible bidders on Single Stage Two Envelope (i.e. Envelope-I: Techno-Commercial Bid and Envelope-II: Price Bid) with **Reverse Auction** for **DEVELOPMENT OF 10MW/40MWh BATTERY ENERGY STORAGE SYSTEM (BESS) AT NTPC RAMAGUNDAM.**

### **2.0 BRIEF SCOPE OF WORK**

The brief scope of work interalia includes the following:

- I. Design, Engineering, Supply, Packaging and Forwarding, Transportation, Unloading, Storage, Construction, Erection, Testing, Commissioning of grid connected Battery Energy Storage System (BESS) with **10 MW and 40MWh rated AC discharge capacity at 33KV switchgear interconnection point** and Comprehensive Operation and Maintenance (O&M) works of BESS system throughout the service lifetime of the project from the date of successful completion of trial run shall be on turnkey basis.
- II. The BESS shall comprises of Battery System, Battery Management System (BMS), Energy Management System (EMS) and SCADA, Power Conversion System (PCS), Protection system, Communication System, HT & LT System, Auxiliary power system, Monitoring & Control system, Fire Fighting, remote control and monitoring, and all other associated materials and accessories necessary for trouble free operation and maintenance of the BESS system.
- III. Design, install and make ready for the electrical connections from the battery energy storage system to the grid.
- IV. Site-grading, clearing of vegetation.
- V. Providing power supply and water supply for construction purposes.

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- VI. Construction of control room with switchgear room, with all electrical fitting and furniture, security cabin etc.
- VII. All associated electrical and civil works required for interfacing with grid (i.e. transformer(s), switchgear, protection system, cables, etc).
- VIII. Metering system as per specifications.
- IX. Provide documentation for design and expected performance through design calculations, software, design drawings, equipment drawings, and modifications to the existing drawings.
- X. Develop detailed start up and site acceptance plan
- XI. Provide training for the operators, engineers, technicians and maintenance personnel.
- XII. Supply any special equipment and tools required for the operation and maintenance of the project.
- XIII. Comprehensive operation and maintenance for service lifetime of the project.
- XIV. Provide a warranty for the battery energy storage system (BESS) and its constituents equipments as per technical specification.

*The detailed scope of work is as defined in the bidding document No.: **RE-CS-5747-004(B)-9***

**3.0** NTPC intends to finance the subject package through Own Resources.

**4.0** Detailed specification, Scope of work and Terms & Conditions are given in the bidding documents, which are available for examination and downloading at e-tender portal (as specified in this notice) and as per the following schedule:

IFB No.	<b>RE-CS-5747-004(B)-9</b>	
IFB Date	13.04.2022	
Period of Downloading of Bidding Documents	22.04.2022 to 06.05.2022 upto 1730 Hrs. (IST)	
Pre Bid Conference and Last Date for receipt of queries from prospective Bidders	10.05.2022	
Last Date and Time for receipt of bids comprising both Techno-Commercial Bid and Price Bid	23.05.2022	14:30:00 (IST)
Date & Time of opening of Techno-Commercial Bid	23.05.2022	15:30:00 (IST)

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Date and Time of start of Reverse Auction	Shall be Intimated separately by NTPC
Cost of Bidding Documents in INR	INR 22,500/- (Indian Rupees Twenty-Two Thousand Five Hundred only)

- 5.0** All bids must be accompanied by Bid Security for an amount of **INR 1,00,00,000/- (Indian Rupees One Crore only)** 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 AND SHALL NOT BE OPENED. 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.***

(Bidders who are unable to send the Original Bank Guarantee in physical form at the tender opening location, may adopt procedure given in Bidding documents or may opt for Online Transfer of Bid Security through NEFT/RTGS to NTPC's Bank whose details are provided in the Bidding Document).

### **6.0 Qualifying Requirements for Bidders:**

#### **PROJECT CONFIGURATION (BESS Capacity: 10MW and 40 MWh)**

In addition to the requirements stipulated under section Instruction to Bidder (ITB), the Bidder should also meet the qualifying requirements stipulated hereunder in clause 1.0 and Clause 2.0.

#### **1.0 TECHNICAL CRITERIA**

- 1.1 Route 1:** The bidder should have manufactured and supplied Batteries for grid interactive battery energy storage system(s) of cumulative installed capacity of minimum 6.0MW and 6.0 MWh, out of which at least one grid interactive battery energy storage system should be of minimum 2.0 MW and 2.0 MWh capacity. The reference grid interactive battery energy storage system of minimum 2.0 MW and 2.0 MWh capacity must have been in successful operation for at least six (6) months prior to the date of techno-commercial bid opening.

**OR**

- 1.2 Route 2:** The bidder should have supplied, installed/ supervised installation and commissioned/ supervised commissioning of grid interactive battery energy storage system(s) of cumulative installed capacity of minimum 6.0 MW and 6.0 MWh, out of which at least one grid interactive battery energy storage system should be of minimum 2.0 MW and 2.0 MWh capacity. The reference grid interactive battery energy storage system of minimum 2.0 MW and 2.0 MWh capacity must have been in successful operation for at

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least six (6) months prior to the date of techno-commercial bid opening.

**OR**

- 1.3 **Route 3:** The Bidder should have technical collaboration agreement or should have a manufacturing license or should be a joint venture company of a Battery Manufacturer meeting the requirements stipulated at Clause 1.1 (Route-1) above. In case of technical collaboration/ license, bidder shall furnish along with the bid a copy of such license/collaboration agreement done with the battery manufacturer and such license/collaboration agreement should be ongoing and valid for a period at least up to the end of the O&M period of the contract. In case the bidder is a joint venture company of a battery manufacturer meeting the requirements stipulated at clause 1.1 (route 1), the bidder shall submit a copy of joint venture formation document along with their techno commercial bid. Bidder shall also furnish an Undertaking jointly executed by the license provider/ technology collaborator/ JV partner qualified as per clause 1.1 and the Bidder along with its bid for complete performance of the contract jointly or severally as per format enclosed in the bid document failing which the Bidder's bid is liable to be rejected.

**OR**

- 1.4 **Route 4:**

- (i) The bidder should have executed in the last ten (10) years an industrial project either as developer or as EPC Contractor in the area of power/ steel/ oil and gas/ petrochemical/ fertilizer/cement/ or any other process industry, of a value not less than **INR 72 Cr (Indian Rupees Seventy Two Crore Only)** in a single project or single work respectively and the same must be in successful operation for at least one (1) year prior to the date of techno-commercial bid opening.

**AND**

- (ii) The bidder should have executed at least one (1) Electrical Sub-station of minimum 33kV voltage level, consisting of equipments such as 33kV or above voltage level circuit breakers and power transformer, either as developer or as EPC Contractor which must be in successful operation for at least one (1) year prior to the date of techno-commercial bid opening.

The works referred at Clause 1.4(i) & 1.4(ii) can be in same or different projects.

**OR**

- 1.5 **Route 5:** The bidder should be an Indian company registered in India and should be Group company/Holding Company/Subsidiary company of a firm meeting the requirement(s) of Clause 1.1 or 1.2 above. In such a case, Bidder shall furnish an Undertaking jointly executed by the firm qualified as per clause 1.1 or 1.2 and the Bidder along with its bid for complete performance of the contract jointly or severally as per format enclosed in the bid document failing which the Bidder's bid is liable to be rejected.

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### Notes for Clause 1.0

- a. The reference grid interactive battery energy storage system of minimum 2.0 MW and 2.0 MWh capacity should be at a single location developed by Bidder for itself or any other client.
- b. Bidder shall submit the certificate of successful completion and operation from the Owner. Certificate issued by owner in the name of Bidder/intermediary Organisation shall be acceptable. However, if bidder in clause 1.4 is a developer, certificate of successful commissioning of the project issued from Government Renewable Nodal Agency/Government Enterprise/ Discom/ Electricity Board etc and evidence of successful operation from intermediary procurer/ procurer/Discom/Electricity Board etc shall be submitted.
- c. For Clause 1.4, bidder shall submit a documentary evidence for the value of the project certified by a Chartered Accountant.
- d. Direct/Indirect Order  
The bidder shall also be considered qualified, in case the award for executing the reference work has been received by the bidder either directly from the owner of the plant or any other intermediary organization. In such a case, a certificate from such owner of plant or any other intermediary organization shall be required to be furnished by the bidder along with its techno-commercial bid in support of bidder's claim of meeting the qualification requirement as per clause 1.1 or 1.2, or 1.4 above. Bidder shall also submit a certificate of successful completion and operation from the Owner in line with note(b) above.
- e. Developer means an entity who has either executed or got executed the work/ project as owner of industrial projects.
- f. The execution of industrial project as EPC Contractor under clause 1.4 means, such EPC Contractor is responsible for all the activities i.e. Design/Engineering, Procurement, Construction (with/without civil works) and Commissioning of a project/work.
- g. The portion of work related to power transformer such as supply and or installation mentioned at cl. no. 1.4 (ii) can either be done by EPC contractor by themselves or by the owner.
- h. Projects with Battery supplied by developer/owner as free issue item to bidder shall also be considered eligible for route 1.2 of QR
- i. In clause 1.3, if the bidder is a joint venture company, then the Joint Venture company should have been incorporated in India under the Companies Act of India, as on the date of techno-commercial bid opening, promoted by (i) an Indian Company registered in India under Companies Act of India and (ii) a qualified Battery manufacturer meeting the requirements of clause 1.1

### **2.0 FINANCIAL CRITERIA**

- 2.1 The average annual turnover of the Bidder, should not be less than **INR 72 Cr (Indian Rupees Seventy-Two Crores Only)** during the preceding three (3) completed financial years as on the date of techno-commercial bid opening.

In case a Bidder does not satisfy the average annual turnover criteria 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

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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 its 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.

- 2.2 Net Worth of the Bidder as on the last day of the preceding financial year should not be less than 100% (one hundred percent) of bidder's paid-up share capital. In case the Bidder does not satisfy 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% (one 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 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% (seventy five percent) of the respective paid up share capitals and Y1, Y2, Y3 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 on 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) Certificate from the CEO/CFO of the Holding Company, as per the format enclosed in the bidding documents, stating that the unaudited unconsolidated financial statements form part of the consolidated financial statement of the Holding Company.

In case where audited results for the last financial year as on date of techno-commercial bid opening are not available, the financial results certified by a practicing Chartered Accountant shall be considered acceptable. In case the Bidder is not able to submit the Certificate from a practicing Chartered Accountant certifying its financial parameters, the audited result of three (3) consecutive financial years preceding the last financial year shall be considered for evaluating 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 techno-commercial bid opening and the Certificate from a practicing Chartered Accountant certifying the financial parameters is not available.

### **Notes for Clause 2.0**

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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 does 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 financial figure indicated in foreign currency (Clause 1.4 (i) and Clause 2.1), the exchange rates as on seven (7) days prior to the last date of submission of bid shall be used.

**7.0** NTPC reserves the right to reject any or all bids or cancel/withdraw the Invitation for Bids without assigning any reason whatsoever and in such case no bidder / intending bidder shall have any claim arising out of such action.

**8.0** Interested parties are required to get registered with M/s ISN Electronic Tender Services website <https://www.bharat-electronictender.com> (if not registered already). The cost of the bidding documents as mentioned above is required to be submitted along with GSTIN and Organization ID registered with ETS portal in the manner specified at 8.1 below. After registration with ETS portal and payment of the cost of bidding documents as above, a complete set of Bidding Documents may be downloaded by any interested Bidder from ETS Portal <https://www.bharat-electronictender.com> with Tender Search Code **NTPC-2022-TN000001**. Interested parties are required to ensure that they have downloaded the official copy of Bidding documents against Tender Search code- **NTPC-2022-TN000001** from above mentioned website without which they will not be able to submit their bids. For technical assistance call ETS Helpdesk at 0124-4229071, 4229072.

**8.1** Interested Bidders can pay for the cost of documents as mentioned above in the form of Electronic transfer/NEFT Payments in the following account details of NTPC:

Account Number	52142904702
IFSC Code	SBIN0020511
Name of the Bank	State Bank of India
Branch Code	20511
Address	Scope Complex Lodhi Road Branch, Ground Floor, Core-6 Scope Complex, Delhi-110003

In case of electronic fund transfer, the bidder shall be required to forward the copy of transfer receipt/electronic transfer receipt from their registered email id to the concerned nodal officers of NTPC as mentioned below requesting for access for download of the bidding documents in working hours between Monday to Friday.

***Note: No hard copy of Bidding Documents shall be issued.***

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**8.1** Issuance of Bid Documents to any Bidder shall not construe that such Bidder is considered to be qualified. Bids shall be submitted online. Bidder shall furnish Bid Security, Integrity Pact, Pass Phrase and Power of Attorney separately offline as detailed in Bidding Documents before the stipulated bid submission closing date and time at the address given below.

**9.0** Transfer of Bidding Documents purchased by one intending Bidder to another is not permissible.

**10.0** *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.*

*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.*

**11.0 Address for communication:**

Addl. General Manager (Renewable Energy-Contract Services) / Sr. Manager (Renewable Energy-Contract Services), NTPC Limited, 3<sup>rd</sup> Floor, Engineering Office Complex (EOC) Sector-24, NOIDA, Distt. Gautam Budh Nagar, (UP), India, Pin - 201301 on Telephone No. +91-120-4948330

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