

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

INVITATION FOR BIDS (IFB)

FOR

**UPGRADATION/ R&M OF CONTROL SYSTEM OF
SIMHADRI, Stage-I (2X500 MW)
(Domestic Competitive Bidding)**

Bidding Document No: CS-3520-405-9

Date : 23.09.2022

1.0 NTPC Limited invites on-line bids on **Single Stage Two Envelope Basis (i.e. Envelope-I: Techno-Commercial and Envelope-II: Price)** from eligible Bidders for **UPGRADATION/ R&M OF CONTROL SYSTEM OF SIMHADRI, Stage-I (2X500 MW)**, as per the scope of work briefly mentioned hereinafter.

2.0 Brief Scope of Work

Design, Engineering, Re-engineering, Manufacturing, Refurbishment/Retrofitting, Fabrication, Assembly, Inspection and Pre-shipment Testing at supplier's works, Packing for transportation, Supply, Port Clearance, Port Handling & Port Charges, if any, forwarding to site, Inland transportation for delivery at site, inland transit insurance, unloading & Storage at site, installation, interconnection with related plant and equipment, calibration, testing, commissioning and putting the Control and Instrumentation System together with all accessories, auxiliaries and associated equipment, Performance & Guarantee test and handing over to the Employer complete Control and Instrumentation System comprising of:

- UNIT DDCMIS for control monitoring and operation of main plant equipments comprising of SG-C&I (BMS, SADC etc.), TG-C&I (TP including Over Speed Protection, EHC, TSC, ATRS, ATT, HP-LP BYPASS and Generator Auxiliaries etc.) and BOP C&I System (ID, FD , PA, APH, BFPs, CEP, APH, Heaters, etc.) , Electrical breakers.
- WATER DDCMIS for control monitoring and operation of common equipment at DM, PT & PT Chlorination, firewater pump house, CPU regeneration & service vessel, CW Chlorination, Electrical breakers.
- SAC DDCMIS for control monitoring and operation of common equipments of CW, Compressor, AC & Ventilation, Electrical breakers.
- AHP DDCMIS for control monitoring and operation of common equipments at / of AHP including Ash Silo, AWRS system, Electrical breakers.
- CHP DDCMIS for control monitoring and operation of common equipments at / of CHP including Electrical breakers.

- HMIPIS and Station LAN
- Measuring Instruments like Electronic Transmitters, Temperature elements & Temperature transmitters, Vibration Monitoring system, Analyzers for offsite areas, etc.
- Electric Power Supply Systems
- Process Connection and Piping including LIEs/ LIRs
- Power cables, Control Cables, Instrumentation cables and special cables
- Control Desk, Panels, furnitures and LVS.
- Main equipment (SG & TG) related special instrumentation system like Scanners, HEA Igniters and TSI, Auto Synchronizer, Over Speed Protection Modules & Load Transducers for Main Turbine and Generator.
- CCTV for plant and offsite areas
- Tools and Tackles
- Mandatory Spares

This scope shall also include dismantling of Employer's equipments/systems at site, AMS for DDCMIS and training for employer's personnel etc. as per the specification and scope defined in the bidding documents.

The detailed scope of work shall be as per specification and scope defined in the Bidding Document for 'Upgradation / R&M of Control System of Simhadri Stage-I (2x500MW)'.

3.0 NTPC intends to finance the aforesaid Package through Domestic Funds / Own Resources.

4.0 Detailed specification, scope of work and terms & conditions are given in the Bidding Documents, which are available at Government e-procurement portal of NIC (GePNIC) at website- <https://eprocurrentpc.nic.in/> and as per the following schedule:

Issuance of IFB	23.09.2022
Documents Download Dates and Time	From 26.09.2022
Last date for receipt of queries from bidders (if any) *	10.10.2022
Bid (both Techno-Commercial and Price) receipt date & time	Upto 20.10.2022 by 1500 hrs. (IST)
Date & Time for opening of Envelope-I (Techno-Commercial bid)	21.10.2022 at 1500 hrs. (IST)

Date & Time for opening of Envelope-II (Price bid)	Shall be intimated after opening of Techno- Commercial Bid.
Cost of Bidding Documents in INR	INR 22,500.00

*No Queries from Bidders, whatsoever, shall be entertained by the Employer beyond the last date of receipt of Queries as specified above.

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 Bidding Documents.

5.1 Acceptable Tender Fee payment proof shall be uploaded by all the bidder in the "Fee Cover" at the GePNIC Portal.

6.0 Qualifying Requirements for Bidders:

Qualifying Requirement (QR) for subject package is Attached as **Annexure-I**.

7.0 'Class-I local suppliers' and 'Class-II local suppliers' only 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.

7.1 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.

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

9.0 Issuance of Bidding Documents to any bidder shall not construe that bidder is considered qualified.

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

11.0 A complete set of Bidding Documents may be downloaded by any interested Bidder from the website <https://eprocurmentpc.nic.in/>. The tender is invited under e-tendering process. The bidders can enroll themselves on the website <https://eprocurmentpc.nic.in/> using the option "online Bidder Enrolment". The said website also has the detailed guidelines on enrollment and participation in the bidding process including Bidder Manual for online fee payment.

12.0 Address for Communication

Sr. Manager (CS)/ AGM (CS)

NTPC Limited

Plot A-8A, Sector 24, Noida-201301

State of U.P. India

Contact: 9650995563/9650992301

e-mail : kavishminocha@ntpc.co.in / abhishekjain02@ntpc.co.in

Websites : <https://eprocurentpc.nic.in/> or
www.ntpctender.com or
www.ntpc.co.in

13.0 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

1.0 In addition to the requirements stipulated in section Instructions to Bidder (ITB), the Bidder should also meet the qualifying requirements of any one of the qualifying routes stipulated under clause 2.0 or 3.0 and the requirements stipulated under clauses 4.1 and 4.2 (if applicable).

2.0 Route-1 (For Bidder)

The Bidder should have

- (A) Engineered, Manufactured, Supplied, Erected/Supervised Erection & Commissioned/Supervised Commissioning Distributed Digital Control, Monitoring & Information system (DDCMIS) / Distributed Control System (DCS), which is in successful operation in at least one (1) unit of coal fired station having unit rating of 200 MW or above for a period of not less than one (1) year as on the date of bid opening.
- (B) Engineered, Manufactured, Supplied, Erected/Supervised Erection & Commissioned/Supervised Commissioning DDCMIS / DCS whose control system is either same or of the same series as being offered for this package & which is in successful operation in at least one (1) unit of coal fired station having unit rating of 200 MW or above for a period of not less than one (1) year as on the date of bid opening.
- (C) The control system of both (A) and (B) above shall necessarily include following sub-systems as a minimum,

1. Station C&I consisting of following as minimum

- a. Modulating control for Steam-Generator (SG)
- b. Modulating control for Feedwater/ Condensate Cycle
- c. Binary control of the auxiliaries for Steam-Generator (SG)
- d. Binary control of the auxiliaries for Turbine-Generator (TG)

AND

2. SG C&I consisting of following as minimum on coal fired boiler

- a) Burner Management System (BMS)
- b) Boiler Protection

AND

3. TG C&I consisting of following as minimum on KWU/Siemens design steam turbines

- a) Turbine Electro hydraulic Governing Control system including Turbine protection
- b)

It is not essential that all the three sub-systems SG C&I, TG C&I and Station C&I are implemented in a single unit i.e., Bidder may participate even if the above has been carried out for these three sub-systems in three different units.

3.0 Route-2 (For Bidder with Collaborator/Associate)

The Bidder, who meets the requirements at Cl. 2.0 (A) with Cl. 2.0 (C) 1 only may also participate provided it associates with a DDCMIS/DCS manufacturer, who meets the requirements of Cl. 2.0 (A), (B) & (C) (1, 2, 3) above, for engineered, supplied and commissioned the respective DDCMIS/DCS.

In such a case, the Bidder should furnish along with its Techno-Commercial bid a Deed of Joint Undertaking (DJU), jointly executed by it along with its Collaborator/ Associate for full responsibility of the performance of DDCMIS/ DCS portion of the Contract as per format enclosed with the bidding documents in which the Collaborator/ Associate and the Bidder shall be jointly & severally liable to the Employer to perform all contractual obligations for the scope of work for which the Collaborator/ Associate is responsible. This Deed of Joint Undertaking should be submitted along with the Techno-Commercial Bid, failing which the Bidder shall be disqualified and its bid shall be rejected. In case of award, the Collaborator/ Associate shall be required to furnish an on-demand bank guarantee as per the format enclosed with the bidding documents for a value equal to 2% (two percent) of the total contract price in addition to the contract performance security to be furnished by the Bidder.

4.0 Financial Criteria:

4.1 Financial Criteria for Bidder

- a) 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 **Rs 4078 Lakhs only (Indian Rupee four thousand seventy eight Lakhs only)**.

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 Bidder's 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.

- b) The Net Worth of the Bidder as on the last day of the preceding financial year should not be less than 100% (hundred percent) of its 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 Company 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.

- c) In case the Bidder is not able to furnish its audited financial statements on stand alone 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 in the bid documents, stating that the unaudited unconsolidated financial statements form part of the consolidated annual financial statements of the Holding Company.
In case 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 practicing Chartered Accountant certifying its financial parameters, the audited results of the 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 bid 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.

4.2 Financial Criteria for Collaborator/Associate

- a) The average annual turnover of the Collaborator/Associate, in the preceding three (3) financial years as on the date of Techno-Commercial bid opening, should not be less than **Rs 4078 Lakhs only (Indian Rupee four thousand seventy eight Lakhs only)** or in equivalent foreign currency.

In case a Collaborator/Associate 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 Collaborator/Associate 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 Collaborator/Associate in case of award.

- b) The Net Worth of the Collaborator/Associate as on the last day of the preceding financial year should not be less than 100% (hundred percent) of its paid-up share capital. In case the Collaborator/Associate 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 Company wherever applicable. In such a case, however, the Net Worth of the Collaborator/Associate 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.

- c) In case the Collaborator/Associate is not able to furnish its audited financial statements on stand-alone entity basis, the unaudited unconsolidated financial statements of the Collaborator/Associate can be considered acceptable provided the Collaborator/Associate further furnishes the following documents for substantiation of its qualification:
- (i) Copies of the unaudited unconsolidated financial statements of the Collaborator/Associate 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 in the bid documents, stating that the unaudited unconsolidated financial statements form part of the consolidated annual financial statements of the Holding Company.
- In case 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, Collaborator/Associate is not able to submit the Certificate from practicing Chartered Accountant certifying its financial parameters, the audited results of the 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 bid 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:

- (i) Net worth means the sum total of the paid up share capital and free reserves. Free reserve 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 Company" 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.