

**NTPC-SAIL Power Company Limited
(A Joint Venture of NTPC & SAIL)**

INVITATION FOR BIDS (IFB)

FOR

Renovation and Modernization of Control and Instrumentation System of

Durgapur CPP-II(2X60 MW)

(Domestic Competitive Bidding)

Tender/SRM RFx No: 2800009991

Date: 09.04.2025

Bidding Document No: CMCC250009

1.0 NTPC-SAIL Power Company Limited invites on-line bids on NSPCL SRM portal on **Single Stage Two Envelope Basis (i.e. Envelope-I: Techno-Commercial and Envelope-II: Price)** from eligible Bidders for **Renovation and Modernization of Control and Instrumentation System of Durgapur CPP-II(2X60 MW)**, as per the scope of work briefly mentioned hereinafter.

2.0 Brief Scope of Work

The R&M scope of work for the equipment, material and system shall include design, engineering, reengineering, manufacture / refurbishment / retrofitting, fabrication, assembly, pre-shipment testing at manufacturer's works, proper packing for transportation, delivery at plant site, unloading, storage, 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.

Replacement of existing electronic devices, Invensys make Oil Burner System & MFT, stand-alone microprocessor based controllers, Siemens make EHTC etc with DCS package is intended to procurement of the equipment and systems for control, protection, operation and monitoring of the total plant, except a few areas along with other sub-systems for other functions.

The control system, called Distributed Control system (DCS) is envisaged to consist of the following sub-systems :-

1. Station C&I consisting of following as minimum
 - a. Modulating control for Steam-Generator (SG)
 - b. Modulating control for various Cycles
 - c. Binary control of the auxiliaries for Steam-Generator (SG)
 - d. Binary control of the auxiliaries for Turbine-Generator (TG)
2. SG C&I consisting of following as minimum
 - a. Burner Management System (BMS)
 - b. Boiler Protection
3. TG C&I consisting of following as minimum
 - a. EHTC and TSI system.
 - b. Turbine Protection

Its Human Machine Interface (HMI) is to be based on Large Video Screen (LVS) displays supported by TFT monitor based Operator Work Stations (OWS). These devices through customized user-friendly displays, soft alarm facia and pop-up displays are used for giving fast pin-pointed faults/ status to the operator. Local/Backup operation of some equipments/drives is envisaged through Push Buttons in some application. The total system is to be networked through a Station-Wide LAN for use of real time data of various plant areas by other users like maintenance, planning, efficiency enhancement groups etc with adequate security policies.

The sequence of events recording & alarm annunciation are also implemented as a part of DCS system. A GPS based master and slave clock system is envisaged for uniform and synchronized timing signals throughout the entire station.

The power supply for each of the above control systems is to be based on 24V DC provided through microprocessor based modular system under this package and for the peripherals and other subsystem through existing 230V Single Phase UPS along with battery backup for Main plant.

Field instruments like temperature elements, Temperature Transmitter, Pressure Transmitters, DP transmitters, Level Transmitters along with their process connection & piping as well as measurement systems etc are also procured through this package. Some of Electrical Transduces, ACDB and DCDB are also envisaged.

Apart from above, Operator control desks, panels, shielded twisted pair instrumentation cables, control and power cables, optical fiber cables, field erection material viz. conduits, trays etc are also included in this package.

In addition, dismantling of existing equipment and panels, as identified and as required, is also included in the package.

3.0 NSPCL 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 NSPCL E-tender/ SRM Portal at website-<https://sapportal.nspclsrjan.co.in:50200/irj/portal> and as per the following schedule:

Issuance of IFB	09.04.2025
Documents Download Dates and Time	From 09.04.2025
Last date for receipt of queries from bidders (if any) *	29.04.2025
Bid (both Techno-Commercial and Price) receipt date & time	Up to 19.05.2025 by 15:00 hrs. (IST)
Date & Time for opening of Envelop-I (Techno-Commercial bid)	20.05.2025 at 15:30 hrs. (IST)
Date & Time for opening of Envelop-II (Price bid)	Shall be intimated after opening of Techno- Commercial Bid.
Cost of Bidding Documents in INR	INR 11,250.00

*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 50,00,000/- (Indian Rupees Fifty Lakhs only)** in the form as stipulated in Bidding Documents.

ANY BID NOT ACCOMPANIED BY AN ACCEPTABLE BID SECURITY SHALL BE REJECTED BY THE EMPLOYER AS BEING NON-RESPONSIVE AND SHALL NOT BE OPENED

- 5.1 Acceptable Tender Fee payment proof shall be uploaded by all the bidder in the “Technical RFx-> Folder->Technical Bid” at the NSPCL SRM Portal.

- 6.0 A complete set of Bidding Documents may be downloaded by any interested Bidder after logging in NSPCL SRM Portal (<https://sapportal.nspclsrijan.co.in:50200/irj/portal>) after payment (non-refundable) of the cost of the documents through the link available in the NSPCL SRM portal.

For logging on to the NSPCL SRM Portal, the bidder would require SRM User ID and Password which can be obtained from NSPCL Corporate Office by raising request through email on vidyathool@nspcl.co.in or hodcnm.cc@nspcl.co.in along with Registration Form duly filled up on Bidder's letter head and attaching required supporting documents. The Registration form is available on NSPCL website www.nspcl.co.in under tab “Tenders”→ “NSPCL SRM PORTAL”.

No hard copy of Bidding Documents shall be issued. Bids shall be submitted ONLY at the NSPCL SRM Portal i.e., <https://sapportal.nspclsrijan.co.in:50200/irj/portal>

7.0 Qualifying Requirements for Bidders:

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

- 8.0 '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.

- 9.0 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.

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.

- 10.0 Transfer of Bidding Documents purchased by one intending Bidder to another is not permissible.
- 11.0 Downloading/Issuance of Bidding Documents to any bidder shall not construe that bidder is considered qualified.

12.0 NSPCL 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.

13.0 Address for Communication

GM (CC&M),
NTPC SAIL Power Company Limited,
4th Floor, NBCC Tower,
15, Bhikaiji Cama Place,
New Delhi-110066
Contact: 011-26717376 / 77
e-mail: vidyathool@nspcl.co.in/ hodcnm.cc@nspcl.co.in

Websites: https://sapportal.nspclsrijan.co.in:50200/iri/portal_or
www.nspcl.co.in

14.0 Registered Office

NTPC- SAIL POWER COMPANY LIMITED
4th Floor, NBCC Tower,
15 Bhikaiji Cama Place,
New Delhi - 110066
Corporate Identification Number: U74899DL1999PLC098274,
Website: www.nspcl.co.in

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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 60 MW or above for a period of not less than one (1) year as on the date of techno-commercial 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 60 MW or above for a period of not less than one (1) year as on the date of techno-commercial 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

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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 steam turbines

- a) Turbine Electrohydraulic Governing Control system including Turbine protection

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 collaborates/associates with a DDCMIS/DCS manufacturer, who meets the requirements of Cl. 2.0 (A), (B) & (C) (1, 2, 3) above, for having engineered, supplied and commissioned the respective DDCMIS/DCS.

In such a case, the Bidder shall 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 shall 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%

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(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 INR 16.6 Crores only (Indian Rupee Sixteen Crores and Sixty 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.

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- 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

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 INR 16.6 Crores only (Indian Rupee Sixteen Crores and Sixty Lakhs only).

- a) 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

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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.

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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 and net worth indicated in foreign currency, the exchange rate as on seven (7) days prior to the date of Techno-Commercial bid opening shall be used.