

## INVITATION FOR BIDS (IFB)

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

**(CORPORATE CONTRACTS, NOIDA)**

**INVITATION FOR BIDS (IFB)**

**FOR**

**DRY SORBENT INJECTION (DSI) SYSTEM PACKAGE**

**FOR**

**NSPCL PROJECTS (3 Nos.)**

**(Domestic Competitive Bidding)**

**IFB No.: 2022\_NTPC\_71634\_1**

**Common Bidding Document No: CS-0011-109C(3)-9**

**Date : 10.01.2023**

**1.0** NTPC Limited on behalf of NTPC-SAIL Power Company Ltd (NSPCL) invites e-Bids from eligible Bidders for **Dry Sorbent Injection (DSI) System Package for NSPCL Projects** on Single Stage Two Envelope bidding basis [i.e. Envelope-I (Techno-Commercial) Bid and Envelope-II (Price) Bid], as per the brief scope of work mentioned hereinafter. NSPCL Projects comprises the following Projects:

1. Rourkela CPP-II (2 X 60 MW)
2. Durgapur CPP-II (2 X 60 MW)
3. Bhilai CPP-II (2 X 30 MW + 1x14 MW)

### **2.0 Brief Scope of Work**

The scope of work includes engineering, design, manufacture, supply, erection, commissioning and testing of complete mechanical, electrical, C&I and associated civil and structural works for Dry Sorbent Injection (DSI) System and its auxiliaries for NSPCL Bhilai PPII, Durgapur II and Rourkela II projects.

The DSI system is based on Sodium Bicarbonate (SBC) as reagent and includes permanent Storage Silo for SBC complete with Truck Unloading System, SBC Feeding, Milling & Injection system, Instrument air compressors etc. Computational Fluid Dynamics (CFD) modelling is also included in the scope for understanding the particle dispersion in the gas flow under low unit load conditions.

The scope also includes Associated Control & Instrumentation (C&I) equipment including SO<sub>2</sub> analyser, all associated Electrical work including Electrical system

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common for all units of a project, Civil and structural work including foundation, paving and miscellaneous foundations.

The detailed scope of work shall be as per specifications and scope defined in the Common Bidding Document no. **CS-0011-109C(3)-9** for Dry Sorbent Injection (DSI) System Package for NSPCL Projects.

**3.0** NSPCL intends to finance the aforesaid Package through Internal accruals / ECB/ ICB.

**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	10.01.2023
IFB/Tender Ref. no. (For Common Techno-commercial bid)	2022_NTPC_71634_1
IFB/Tender ID (For Price bid of Rourkela)	CS-0011-109C(3)-9-R
IFB/Tender ID (For Price bid of Durgapur)	CS-0011-109C(3)-9-D
IFB/Tender ID (For Price bid of Bhilai)	CS-0011-109C(3)-9-B
Documents Download Dates and Time	From 10.01.2023
Last date for receipt of queries from bidders (if any) *	23.01.2023
Bid (both Techno-Commercial and Price) receipt date & time	Upto 06.02.2023 by 1500 hrs. (IST)
Date & Time for opening of Envelope-I (Techno-Commercial bid)	07.02.2023 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** Bidder is required to furnish a Declaration, along with their Bid Security, in the Format stipulated in the Bidding documents declaring number of Projects they are interested in taking award. Bidders shall submit the Bid Security as specified below based on the number of Projects they are interested in taking the award: -

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- a) For Bidders interested in Three (3) Projects for award: All Bidders who are interested in three (3) projects for award must submit Bid Security for an amount INR 1.5 Crore.
- b) For Bidders interested in Two (2) Projects for award: All Bidders who are interested in two (2) projects for award must submit Bid Security for an amount INR 1 Crore.
- c) For Bidders interested in one (1) Project for award: All Bidders who are interested in one (1) project for award must submit Bid Security for an amount INR 0.5 Crore.

Any Bid not accompanied by an acceptable Bid Security along with Declaration regarding number of Projects for which Bidder is interested in taking award shall be liable for rejection by the Employer as being non-responsive.

**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' 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.

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**11.0** A complete set of Bidding Documents may be downloaded by any interested Bidder from the website <https://eprocurrentpc.nic.in/>. The tender is invited under e-tendering process. The bidders can enroll themselves on the website <https://eprocurrentpc.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** Employer shall allow purchase preference, as indicated in the bidding documents, to bids from local suppliers as defined in the bidding documents. The bidders may apprise themselves of the relevant provisions of bidding documents in this regard before submission of their bids.

**13.0 Address for Communication**

Sr. Manager (CS)/ DGM (CS)  
NTPC Limited  
Plot A-8A, Sector 24, Noida-201301  
State of U.P. India  
Contact: 9650999896 / 9650998784

e-mail : [mohan02@ntpc.co.in](mailto:mohan02@ntpc.co.in) / [arvindkumar01@ntpc.co.in](mailto:arvindkumar01@ntpc.co.in)

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

**14.0 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](http://www.ntpc.co.in)

**Annexure-I to IFB****QUALIFYING REQUIREMENTS FOR DRY SORBENT INJECTION (DSI) SYSTEM PACKAGE FOR NSPCL PROJECTS - BHILAI PP-II, DURGAPUR-II & ROURKELA-II****1.0.0 Technical Criteria**

The Bidder should meet the qualifying requirements stipulated in any one of the qualifying routes i.e Route-1 (clause 1.1.0) or Route-2 (clause 1.2.0) including requirements stipulated in sub clauses of respective Route. In addition, the Bidder should also meet the requirements stipulated under clause 2.0.0 together with the requirements stipulated under section ITB.

**1.1.0 Route-1: Qualified Dry Sorbent Injection System Manufacturer (QDSIM)**

1.1.1 The Bidder should have designed, engineered, supplied, erected/supervised erection and commissioned/supervised commissioning of at least one (1) no. Dry Sorbent Injection System, in a coal fired unit, having flue gas flow of not less than 4,00,000 Nm<sup>3</sup>/hr, with sulphur dioxide capture efficiency of at least 50%. The above Dry Sorbent Injection System should be using Sodium Bicarbonate as reagent and should have been in successful operation for a period not less than one (1) year prior to the date of Techno-Commercial bid opening.

**1.2.0 Route-2: EPC Organization with Collaboration and Licensing Agreement with QDSIM**

1.2.1 The Bidder should be an Engineering, Procurement and Construction (EPC) organization and should have executed, in the last 10 years, at least one project (in single or multiple contract) on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer, Flue Gas Desulphurisation and / or any other process industry having a total contract value of INR 100 million or more. This project should have been in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening.

1.2.2 Bidder should also have a valid ongoing collaboration and licensing agreement with a QDSIM meeting requirements of clause 1.1.1, valid minimum up to the end of the defect liability period of the contract. In such a case Bidder can either source the Dry Sorbent Injection System from such manufacturer or manufacture/get manufactured the Dry Sorbent Injection System as per the design and manufacturing drawings released by such QDSIM.

1.2.3 Further, the Bidder shall furnish the Deed of Joint Undertaking(s) (DJU) executed by it and the QDSIM, in which the executants of DJU shall be jointly and severally liable to the Employer for successful performance of the Dry Sorbent Injection System as per the format enclosed with the bidding documents. The DJU shall be submitted along with techno-commercial bid, failing which the Bidder shall be disqualified and its bid shall be rejected.

1.2.4 In case of award of a project, the QDSIM will be required to furnish an on demand bank guarantee for an amount of 5 % of the total contract price of the Dry Sorbent Injection System Package in addition to the contract performance security to be furnished by the Bidder.

## Notes for clause 1.0.0

### (1) Definitions

- (i) "QDSIM" (Qualified Dry Sorbent Injection System Manufacturer) means a manufacturer meeting requirements stipulated at clause 1.1.1.
- (ii) Whenever the term 'coal fired' is appearing above, "Coal" shall be deemed to also include bituminous coal/brown coal/ Anthracite coal/lignite.
- (iii) Whenever the term "Sodium Bicarbonate" is appearing above, "Sodium Bicarbonate" shall be deemed to also include Trona (sodium sesquicarbonate / Sodium sesquicarbonate dihydrate).
- (iv) The word "executed" in clause 1.2.1 means the Bidder should have commissioned the project specified in the clause 1.2.1 even if the contract has been started earlier and/or is not completed/closed.

### (2) Erection/Commissioning

Where erection / supervision of erection and commissioning / supervision of commissioning has not been in the scope of the Bidder as mentioned in clause 1.1.1 the Bidder should have acted as an advisor for erection and commissioning. Necessary documents / certificates from the client, in support of above shall be furnished along with the Techno-Commercial bid.

### (3) Direct / Indirect order

The Bidder/ QDSIM shall also be considered qualified, in case the award for executing the reference works has been received by the Bidder/ QDSIM either directly from owner of plant or any other intermediary organization. However, a certificate from such owner of plant or any other intermediary organisation shall be required to be furnished by the Bidder along with its Techno-Commercial bid in support of the Bidder's/ QDSIM claim of meeting the qualification requirement as per clause 1.1.1/1.2.1 above. Further, certificate from owner of the plant shall also be furnished by the Bidder along with the Techno-Commercial bid for the successful operation as specified at clause 1.1.1/1.2.1 above.

## 2.0.0 Financial Criteria

### 2.1.0 Financial Criteria of Bidder

- 2.1.1 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 345 Million (Indian Rupees Three Hundred Forty Five Million 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 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.

- 2.1.2** Net worth of the bidder should not be less than 100% (hundred percent) of its paid up share capital as on the last day of the preceding financial year on the date of Techno-commercial bid opening. 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 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. In such an event, the Bidder would be required to furnish along with Techno-Commercial bid, a Letter of Undertaking from the Holding Company and/or Subsidiary(ies) of the Holding Company, supported by the Holding Company's and/or Subsidiary(ies) of 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.

**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 and Y1,Y2,Y3 are individual paid up share capitals.**

- 2.1.3** 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.

**2.2.0 Financial Criteria of Collaborator (Applicable for clause 1.2.0)**

- 2.2.1** The average annual turnover of the Collaborator, in the preceding three (3) financial years as on the date of Techno-Commercial bid opening, should not be less than INR 345 Million (Indian Rupees Three Hundred Forty Five Million only).

<b>QUALIFYING REQUIREMENT FOR DRY SORBENT INJECTION (DSI) SYSTEM PACKAGE</b>	<b>NSPCL BHILAI PPII, DURGAPUR-II, ROURKELA-II</b>
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In case a Collaborator 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 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 to the Collaborator to honour the terms and conditions of the Deed of Joint Undertaking in case of award of the Contract to the Bidder with whom Collaborator is associated.

- 2.2.2** Net worth of the Collaborator should not be less than 100% (hundred percent) of its paid up share capital as on the last day of the preceding financial year on the date of Techno-commercial bid opening. In case the Collaborator 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 company wherever applicable. In such a case, however the Net worth of the Collaborator 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.**

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

- (i) Copies of the unaudited unconsolidated financial statements of the Collaborator 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, Collaborator 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 2.1.0 & 2.2.0**

- (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.
- (v) In case the bidder / collaborator(s) participating under Clause 1.2.0 do not meet the turnover requirement, then, the Turnover of any of the Promoters individually or all the promoters (in a combined manner) (each having Equity Stake more than 25%) of the Subsidiary Company / JV Company would be considered. Each such promoter of the Subsidiary Company / JV Company shall have to meet the Net Worth criteria individually as per clause 2.1.2 and/or 2.2.2. In such an event the Bidder would be required to furnish along with its techno-commercial bid, a Letter of Undertaking from such promoter(s), supported by Board Resolution as per the format enclosed in the bidding documents, pledging unconditional and irrevocable financial support for execution of the Contract by the Bidder in case of award.