

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



**BIDDING DOCUMENTS**

**FOR**

**R&M OF PROCONTROL SYSTEM  
PACKAGE FOR ANTA GAS POWER  
STATION (3X88.71 MW GT + 1X153.2 MW  
ST), Rajasthan.**

**SECTION - I, II, III, IV & V**

**BIDDING DOCUMENT NO. : CS-1600-418(R&M)-9**

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(This document is meant for the exclusive purpose of bidding against this Bid Document No. / Specification and shall not be transferred, reproduced or otherwise used for purposes other than that for which it is specifically issued).

**BIDDING DOCUMENTS**  
**FOR**  
**R&M OF PROCONTROL SYSTEM PACKAGE FOR ANTA GAS POWER STATION**  
**(3X88.71 MW GT + 1X153.2 MW ST), Rajasthan**  
**BID DOCUMENT NO. : CS-1600-418(R&M)-9**

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- 7.(i) Bank Guarantee Form for Advance Payment (For Supply-FOB/Ex-works)
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## Acronyms

BDS	Bid Data Sheet
CIF	Cost, Insurance and Freight
CIP	Carriage and Insurance paid to (place)
CPM	Critical Path Method
EDI	Electronic Data Interchange
EXW	Ex factory, ex works or ex warehouse
FCA	Free Carrier
FOB	Free on Board
FOR	Free on Rail / Road
FP	Forms & Procedures
GCC	General Conditions of Contract
ICC	International Chamber of Commerce
IFB	Invitation for Bids
ITB	Instructions to Bidders
SCC	Special Conditions of Contract
TS	Technical Specifications and Drawings
UNCITRAL	United Nations Commission on International Trade Law
INCOTERMS	International Rules for Interpreting Trade Terms
DISCOMS	Electricity Distribution Companies
GST	Goods and Services Tax

Note : The terms EXW, CIF, etc. shall be governed by the rules prescribed in the current edition of INCOTERMS, published by the International Chamber of Commerce, 33-43 avenue du Président Wilson 75116 Paris, France.

SECTION - I

**INVITATION FOR BIDS (IFB)**

Clause No.	<b>INVITATION FOR BIDS (IFB)</b>  <b>NTPC Limited</b> <b>(A Government of India Enterprise)</b>  <b>(CORPORATE CONTRACTS, NOIDA)</b>  <b>INVITATION FOR BIDS (IFB)</b>  <b>FOR</b>  <b>R&amp;M OF PROCONTROL SYSTEM PACKAGE FOR ANTA GAS POWER STATION</b> <b>(3X88.71 MW GT + 1X153.2 MW ST), Rajasthan</b> <b>(Domestic Competitive Bidding)</b>  <b>Bidding Document No: CS-1600-418(R&amp;M)-9</b> <span style="float: right;"><b>Date : 06.01.2023</b></span>  <b>1.0</b> NTPC Limited invites on-line bids on <b>Single Stage Two Envelope Basis (i.e. Envelope-I: Techno-Commercial and Envelope-II: Price)</b> from eligible Bidders for <b>R&amp;M OF PROCONTROL SYSTEM PACKAGE FOR ANTA GAS POWER STATION (3X88.71 MW GT + 1X153.2 MW ST), Rajasthan</b> , as per the scope of work briefly mentioned hereinafter.  <b>2.0 Brief Scope of Work</b>  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 BOP control system comprising of the following systems along with HMI (including LVS & Station LAN) in Common Control Room:  <b>a.</b> Steam turbine: HP & LP bypass control, Hot well level control, De-aerator level control, Sequence control (GC & SGC), BFPs, CEPs, Lube oil system, hydraulic oil system, vacuum system, Equipment cooling water (ECW / DMCW), auxiliary raw cooling water (ACW / ARCW), drain system, condensate preheating, barring system etc.  <b>b.</b> Boilers (WHRB-1,2 & 3): HP & LP Drum level control / FRS, Sequence control (GC & SGC), flue gas damper control, Live steam system drain system, HP & LP circulation pumps, main steam and bypass steam valves, APH etc.  <b>c.</b> Electrical system: Switchyard breakers / isolators (seven 220 KV lines), incomers & bus couplers and common electrical system etc.	
<b>ANTA GAS POWER STATION (3X88.71 MW GT + 1X153.2 MW ST); BIDDING DOCUMENT NO.: CS-1600-418(R&amp;M)-9</b>	<b>SECTION-I</b> <b>R&amp;M OF PROCONTROL SYSTEM</b> <b>PACKAGE</b> <b>INVITATION FOR BIDS (IFB)</b>	<b>PAGE</b> <b>1 OF 4</b>

Clause No.	INVITATION FOR BIDS (IFB)															
	<p>d. CW / CT system: CW (cooling water) system and CT (cooling tower) pumps system</p> <p>e. Other Common system: Naphtha forwarding system, raw water system, make up water system, service water system etc.</p> <p>This scope shall also include dismantling of Employer's equipment's/systems at site, AMS for DDCMIS and training for employer's personnel etc. as per the specification and scope defined in the bidding documents.</p>															
3.0	NTPC intends to finance the aforesaid Package through DCB / 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- <a href="https://eprocurmentpc.nic.in/">https://eprocurmentpc.nic.in/</a> and as per the following schedule:															
	<table border="1"> <tr> <td data-bbox="354 325 943 367">Issuance of IFB</td> <td data-bbox="943 325 1466 367">06.01.2023</td> </tr> <tr> <td data-bbox="354 367 943 409">Documents Download Dates and Time</td> <td data-bbox="943 367 1466 409">From 06.01.2023</td> </tr> <tr> <td data-bbox="354 409 943 451">Last date for receipt of queries from bidders (if any) *</td> <td data-bbox="943 409 1466 451">13.01.2023</td> </tr> <tr> <td data-bbox="354 451 943 493">Bid (both Techno-Commercial and Price) receipt date &amp; time</td> <td data-bbox="943 451 1466 493">Upto 27.01.2023 by 1500 hrs. (IST)</td> </tr> <tr> <td data-bbox="354 493 943 535">Date &amp; Time for opening of Envelope-I (Techno-Commercial bid)</td> <td data-bbox="943 493 1466 535">30.01.2023 at 1500 hrs. (IST)</td> </tr> <tr> <td data-bbox="354 535 943 577">Date &amp; Time for opening of Envelope-II (Price bid)</td> <td data-bbox="943 535 1466 577">Shall be intimated after opening of Techno- Commercial Bid.</td> </tr> <tr> <td data-bbox="354 577 943 619">Cost of Bidding Documents in INR</td> <td data-bbox="943 577 1466 619">INR 3,375.00</td> </tr> </table>		Issuance of IFB	06.01.2023	Documents Download Dates and Time	From 06.01.2023	Last date for receipt of queries from bidders (if any) *	13.01.2023	Bid (both Techno-Commercial and Price) receipt date & time	Upto 27.01.2023 by 1500 hrs. (IST)	Date & Time for opening of Envelope-I (Techno-Commercial bid)	30.01.2023 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 3,375.00
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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 3,375.00															
	*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 10,00,000/- (Indian Rupees Ten Lakhs only) in the form as stipulated in Bidding Documents.															
	<p><b>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.</b></p>															
	SECTION-I	PAGE														
ANTA GAS POWER STATION (3X88.71 MW GT + 1X153.2 MW ST); BIDDING DOCUMENT NO.: CS-1600-418(R&M)-9	R&M OF PROCONTROL SYSTEM PACKAGE INVITATION FOR BIDS (IFB)	2 OF 4														



Clause No.	INVITATION FOR BIDS (IFB)	
5.1	Acceptable Tender Fee payment proof shall be uploaded by all the bidder in the “Fee Cover” at the GePNIC Portal.	
6.0	<p><b>Qualifying Requirements for Bidders:</b></p> <p>Qualifying Requirement (QR) for subject package is Attached as <b>Annexure-I</b>.</p>	
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	<p>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.</p> <p>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.</p>	
7.2	Benefits for MSEs are not available in this tender being Works Contracts.	
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	<p>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.</p> <p>Notwithstanding anything stated above, the Employer reserves the right to assess the capabilities and capacity of the Bidder / its Collaborators / Associates / Subsidiaries / Group companies to perform the contract, should the circumstances warrant such assessment in the overall interest of the Employer.</p>	
11.0	<p>A complete set of Bidding Documents may be downloaded by any interested Bidder from the website <a href="https://eprocurmentpc.nic.in/">https://eprocurmentpc.nic.in/</a>. The tender is invited under e-tendering process. The bidders can enroll themselves on the website <a href="https://eprocurmentpc.nic.in/">https://eprocurmentpc.nic.in/</a> 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.</p>	
<p>ANTA GAS POWER STATION (3X88.71 MW GT + 1X153.2 MW ST); BIDDING DOCUMENT NO.: CS-1600-418(R&amp;M)-9</p>	<p>SECTION-I R&amp;M OF PROCONTROL SYSTEM PACKAGE INVITATION FOR BIDS (IFB)</p>	<p>PAGE 3 OF 4</p>

<b>Clause No.</b>	<b>INVITATION FOR BIDS (IFB)</b>
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**12.0 Address for Communication**

Manager (CS)/ AGM (CS)  
 NTPC Limited  
 Plot A-8A, Sector 24, Noida-201301  
 State of U.P. India  
 Contact: 0120-4948617/494666662  
 e-mail : vivekanandk@ntpc.co.in / bmandal@ntpc.co.in

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

	<b>SECTION-I</b>	<b>PAGE</b>
ANTA GAS POWER STATION (3X88.71 MW GT + 1X153.2 MW ST); BIDDING DOCUMENT NO.: CS-1600-418(R&M)-9	R&M OF PROCONTROL SYSTEM PACKAGE INVITATION FOR BIDS (IFB)	4 OF 4

**APPROVED QUALIFYING REQUIREMENT FOR R&M OF PROCONTROL SYSTEM PACKAGE  
OF ANTA GAS POWER STATION**

**ANNEXURE-I**

In addition to the requirements stipulated in section Instructions to Bidder (ITB), the Bidder should also meet the qualifying requirements stipulated under clause 1.0 and 2.0 indicated below.

1.0 TECHNICAL CRITERION:

The Bidder should have **Engineered, Manufactured, Supplied, Erected/Supervised Erection & Commissioned/Supervised Commissioning** of Distributed Digital Control, Monitoring & Information system (DDCMIS) / Distributed Control System (DCS), whose control system is either same or of the same series as being offered for this package & which should have been in successful operation in at least one (1) unit of thermal power plant having unit rating of 200 MW or above for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening.

The control system above should necessarily include following sub-systems as a minimum,

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

Notes:

1. Thermal power plant indicated in clause 1.0 means either coal based or gas-based power plant. The unit rating will mean rating of single unit for coal-based power plant and module rating for gas-based power plant, in combination of GT(s) (ISO rating) and ST.

2.0 FINANCIAL CRITERION:

- 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 4.25 Crores only (Indian Rupee Four crores and Twenty five 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

**APPROVED QUALIFYING REQUIREMENT FOR R&M OF PROCONTROL SYSTEM PACKAGE  
OF ANTA GAS POWER STATION**

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.

- 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 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 in the bid documents, stating that the unaudited unconsolidated financial statements form part of the consolidated annual financial statements of the Holding Company.

**APPROVED QUALIFYING REQUIREMENT FOR R&M OF PROCONTROL SYSTEM PACKAGE  
OF ANTA GAS POWER STATION**

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.

**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.

## **ANNEXURE-II**

### **BROAD SCOPE /BOQ OF MAJOR SYSTEMS/ ITEMS COVERED UNDER THE PACKAGE**

The brief scope of work for the equipment/systems included under the package covers design, engineering, manufacturing, testing, delivery to plant site, unloading & storage, erection and commissioning of BOP control system comprising of the following systems along with HMI (including LVS & Station LAN) in Common Control Room :

- a. Steam turbine : HP & LP bypass control, Hot well level control, De-aerator level control, Sequence control (GC & SGC), BFPs, CEPs, Lube oil system, hydraulic oil system, vacuum system, Equipment cooling water (ECW / DMCW), auxiliary raw cooling water (ACW / ARCW), drain system, condensate pre heating, barring system etc.
- b. Boilers (WHRB-1,2 & 3) : HP & LP Drum level control / FRS, Sequence control (GC & SGC), flue gas damper control, Live steam system drain system, HP & LP circulation pumps, main steam and bypass steam valves, APH etc.
- c. Electrical system: Switchyard breakers / isolators (seven 220 KV lines), incomers & bus couplers and common electrical system etc.
- d. CW / CT system : CW (cooling water) system and CT (cooling tower) pumps system
- e. Other Common system: Naphtha forwarding system, raw water system, make up water system, service water system etc.