



**TECHNICAL PRE-QUALIFICATION REQUIREMENT
FOR
2x800MW SINGRAULI STPP
AC & VENTILATION SYSTEM**

PE-PQ-512-553-002-A001

DATE 26-05-25

REV NO 00

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SL. NO.	DESCRIPTION
1	TECHNICAL PRE-QUALIFICATION REQUIREMENT
1.1	Air Conditioning System The Bidder should have designed, supplied, erected and commissioned at least one (1) number of Air conditioning system having a total installed capacity of 300TR or more including stand-by chiller unit (if any), which should have included at least one chilling unit with a minimum capacity of 60TR. The system has been in successful operation for at least one (1) year as on 22.12.2023
OR	
1.2	Ventilation System The Bidder should have designed, supplied, erected and commissioned at least one (1) number ventilation system including similar air washer units having individual fan capacity of 80,000 Cum./hr or more, which should have been in successful operation for at least one (1) year as on 22.12.2023.

NOTES:

A	<p>Bidder should necessarily meet pre-qualification requirement for any one of the packages out of AC System or Ventilation System whose pre-qualifying requirement is mentioned at Sl.no 1.1 or 1.2.</p> <p>For the package, for which bidder does not meet the PQ Requirements, bidder shall submit a valid and duly notarised undertaking as per attached format attached as Annexure-B, along with bid, stating that bidder would outsource such package to a supplier who meets the PQ requirements stipulated at Sl. No. 1.1 or 1.2 above.</p> <p>All the PQR related supporting documents shall be provided by bidder in line with "NOTE-C" below for BHEL/ Customer approval. Any other document which is not mentioned under "NOTE C", however required by BHEL/customer during bidder's or its supplier's approval, shall be provided by bidder.</p>
B	<p>Sub-Qualification Requirement (Sub-QR) for Chiller</p> <p>The chiller unit(s) proposed to be supplied for this package shall be sourced from the manufacturer(s) who have manufactured and supplied at least one (1) no. of similar type of chiller unit each having a capacity of not less than 150 TR, which should have been in successful operation for at least one (1) year as on 22.12.2023. Bidder has to furnish a confirmation to meet above sub-supplier Qualification Requirement in prescribed format attached as Annexure A in tender specification. However, required documents (as mentioned against in note-C below) for establishing chiller proven-ness shall be furnished by successful bidder after placement of order</p> <p>Notwithstanding anything stated above, BHEL/NTPC reserve the right to assess the capabilities and capacity of the OEM to perform the contract, should the circumstances warrant such assessment in the overall interest of BHEL/NTPC.</p>
C	<p>For establishing above mentioned PQR requirement of package(s), the bidder has to submit the following supporting documents:</p> <ol style="list-style-type: none">For establishing PQ requirements for AC System / Ventilation System, copy of minimum one (1) respective performance certificate in English from end user specifying that the system is running successfully for at least one (1) year as on 22.12.2023 along with copy of related Purchase Order (PO)/ Letter of Intent (LOI)/ Letter of award (LOA) or Work order (WO), in support of PQR clause at Sl. no.1 above.Bidder shall submit supporting documents to substantiate technical parameters specified in PQR, if the same is not mentioned in performance certificate/purchase order. In order to meet the PQR, the bidder shall provide all necessary data such as type, design, make, capacity, duty conditions, date of



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commissioning/ operation etc.

- c. Bidder to submit supporting documents in English. If documents submitted by bidder are in language other than English, a self-attested English translated document should also be submitted.
- d. Consideration of offer shall be subjected to end customer's (NTPC) approval of bidder.
- e. After satisfactory fulfilment of all the above criteria/ requirement, offer shall be considered for further evaluation as per NIT and all other terms of the tender.

Notwithstanding anything stated above, BHEL/Customer reserves the right to assess the capabilities and capacity of the bidder to perform the contract, should the circumstances warrant such assessment in overall interest of BHEL/Customer.

The bidder shall meet PQR based on its own credentials. Bid from joint venture (JV) company / Consortium bid is not acceptable.

D Bidder shall submit the supporting documents as per "NOTE C" for approval of its supplier, to BHEL/Customer within 30 days of placement of LOA. Subsequent to approval of the proposed supplier, the successful bidder will place the order on approved supplier within seven (7) days. Bidder shall submit letter of support from the proposed supplier in the prescribed format attached as Annexure-D after the placement of the order.

The approval of the supplier shall be subject to BHEL/Customer acceptance without any cost & time implication to BHEL/customer.

E BHEL shall evaluate and qualify the bidder for this tender based on their performance in current projects under execution. Particulars for evaluation along with qualifying marks are mentioned in Annexure-C.

UNDERTAKING

(Valid and duly notarized on appropriate value stamp paper)

M/s....., having its Registered office at [Complete Address], a company duly organized and existing under the laws of [Country/Act], thereafter termed as “Bidder” having been duly sworn in accordance with the law, do hereby confirms the following:

1. That undertaking is given in connection with [Tender Number/ 2X800 MW Singrauli Thermal Power Project] for the scope defined as per technical specification of Air Conditioning and Ventilation system Package as part of the bidding process.
2. That bidder understands that the pre-qualification requirement stipulated in “TECHNICAL PRE-QUALIFICATION REQUIREMENT FOR 2X800 MW SINGRAULI TPS” document no PE-PQ-512-553-002-A001 are being met for Air Conditioning System and/or Ventilation system package.
3. That for remaining package(s) Air conditioning system or Ventilation system package would be outsourced to a supplier who meets the PQ requirements stipulated at SI No 1.1 or 1.2 of technical pre-qualification requirement for 2X800 MW Singrauli TPS. [strike off whichever package is not applicable based on bidder’s credential]
4. That successful bidder shall submit the supporting documents for approval of the supplier in line with “note C” of “TECHNICAL PRE-QUALIFICATION REQUIREMENT FOR 2X800 MW SINGRAULI TPS” document number PE-PQ-512-553-002-A001, to BHEL/Customer within 30 days of placement of LOA. Subsequent to approval of the proposed supplier, the successful bidder will place the order on approved supplier within seven (7) days from the date of approval. Copy of unpriced P.O. to be shared with BHEL. Bidder shall submit letter of support from the proposed supplier in the prescribed format attached as Annexure D
5. That successful bidder shall outsource the package(s) to respective approved supplier. However, Successful bidder shall be solely liable to the BHEL/Customer to perform contractual obligations including the Design, supply, Erection & commissioning, trial run, performance guarantees and handing over of the respective package(s).
6. That bidder shall not change the supplier once package is outsourced to approved supplier till contract closer without written permission of BHEL.

Assessment of Bidder/ Supplier wrt Performance Feedback from current projects by PS- Regions

Name of Bidder/ Supplier:

Package quoted for:

Reference Project for Performance Assessment:

Date:

Sl. No.	Area of Assessment	Particulars for Evaluation	Maximum marks	Marks awarded
1	Material supply		50	
1a	Package Name	Whether agency has supplied the material within given contractual period after amendment. Supply 100% - 40 marks 75% - 30 marks 50% - 20 marks Marks may be given on pro-rate supply basis.	40	
1b		Assesment of Qualitative ability of agency to follow the approved documents/ BHEL procedures / guidelines for material inspections/ inspection call/ MDCC request / Dispatch documentation.	10	
2	Execution Capabilities		50	
2a	Package Name	Whether agency has engaged competent person as site incharge and other supervisors/ manpowers to handle site execution.	10	
2b		Vendor involvement/ behaviour/ engagement during E&C at site and initiative to resolve of interface issues.	10	
2c		Quality of erection drawings and BOQ availability .	10	
2d		Agency efforts & inclination on implementation of HSE, Safety and quality during excution of system.	10	
2e		Whether agency has made the system ready/ commissioined before corresponding project milestone requirement.	10	
	Grand Total		100	

Note: 1. The feedback to be provided by PS-Regions against the bidder's performance
2. The average qualifying marks will be 60.

PS-Region Representative

PS-Region (Head/Projects)

ANNEXURE – D
LETTER OF SUPPORT FOR SATISFACTORY PERFORMANCE OF
(EQUIPMENT/SYSTEM NAME*) FOR
2 X 800 MW SINGRAULI TPS

TO

BIDDER
ADDRESS

Sub: Letter of Technical Support submitted From (name of the Supplier*) undertaking the responsibility for satisfactory performance of(Name of the system*).

Dear Sirs,

1. In accordance with the Award of the Contract by BHARAT HEAVY ELECTRICALS LIMITED to M/s. (Name of the bidder), we, the aforesaid Supplier, (M/s) shall be fully responsible for the satisfactory performance of the (Name of the system*).
2. Further, the manner of achieving the objective set forth in point 1 above shall be as follows for (Name of the system*):
 - (a) We shall be fully responsible for design, engineering & commissioning and extending all necessary support for putting in to satisfactory operation and carrying out the Guarantee Tests for (Name of the system*) to the satisfaction of the Employer.
 - (b) We shall depute technical experts to Bidder's works/site for supervision during manufacturing, assembly, inspection as and when required by BHARAT HEAVY ELECTRICALS LIMITED/BIDDER. We shall participate in site erection, commissioning and final testing (as and when necessary) of the..... (Name of the system*).
 - (c) We shall participate in Technical Co-ordination meetings (TCMs) from time to time, as and when required by BHARAT HEAVY ELECTRICALS LIMITED/BIDDER.
 - (d) We shall promptly carry out all the corrective measures and shall promptly provide corrected design and shall undertake replacements, rectifications or modifications to the system as and when required by BHARAT HEAVY ELECTRICALS LIMITED/BIDDER in case the system fails to demonstrate successful performance as per contract at site.
3. We, the Supplier do hereby undertake and confirm that this Letter of Technical Support shall be valid for a period of seven (7) years or up to the end of defect liability period of the contract, whichever is later.

Signature of the Authorised Representative:...

For M/s

(Supplier of (Name of the System*))

Name

Designation

Date:.....

Common Seal of the Company

Signature of authorized signatory.....

PRICE ADJUSTMENT FOR SUPPLY AND MANDATORY SPARES

- (i) The Contract price shall be subject to price adjustment during performance of the Contract to reflect changes in the cost of material in accordance with the provisions described below
- (ii) The price adjustment provisions shall be applicable separately for price components relating to Supply of Equipment as per price break-up furnished by the Contractor.
- (iii) Only following components of the Contract Price will be subject to Price adjustment:
 - (a) Ex-Works supply price of Plant and Equipment including commissioning spares, Mandatory spares.
- (iv) Price adjustment amounts towards aforesaid components of Contract Price shall be paid in the respective currencies of Contract (INR).
- (v) The indices for price adjustment shall be as elaborated hereunder.
- (vi) The price adjustment formula for the components of the Contract Price, as mentioned at Sl. No. (iii) above, shall be as stipulated hereinafter.
- (vii) **Ex-Works Price Component of Plant and Equipment including Mandatory Spares**

The amount of price adjustment towards variable portion payable/recoverable on each item shall be computed as under:

Indices to be used for each item shall be as per Economic advisor WPI data for finished goods published at www.eaindustry.nic.in for respective month.

Major list of Indices to be used for HVAC are specified in table A below

Wherever indices of items are not directly specified in WPI data, Indices for the same shall be suitably decided during execution of contract.

EC against each item shall be calculated as per following formula

$$EC = \frac{(P1 - P0) \times EC0}{P0}$$

Where

EC = Adjustment to Ex-Works supply Price Component expressed in the currency of The Contract (INR) payable/recoverable to the contractor for each shipment/dispatch.

EC0 = Ex-Works supply Price for the plant and equipment in the currency of the Contract (INR), shipment/dispatch wise.

P1 = Refers to indices of the month of reckoning the variated price which shall be the month before the month in which dispatch is made

P0 = Refers to indices of Base Month for PVC which shall be taken as the month before the month of the price bid opening.

The latest available indices are to be extrapolated to the above defined month wrt the base month.

Note:

- 1) The price adjustment i.e. either increase or decrease shall be applicable upto the contractual date of completion of supplies. Contractual delivery/dispatch date would mean the delivery/dispatch date mentioned in the order including amendments in delivery/dispatch date (if any). PVC will not be applicable for the period beyond the contractual delivery/dispatch date where delay is attributable for supplier.
- 2) Though the calculation shall be done for each Billing Break up (BBU) item at the time of dispatch as per formula mentioned above, Total/Net price variation of package shall be calculated and settled at the end of all required supplies of the package and shall be limited to (+) 10% of Total Ex-Works Supply Price including Mandatory spares. There shall be no limit on negative value of PVC.

TABLE A

Chillers
Cooling Towers
Steel pipes, tubes & poles
Cold Rolled (CR) Coils & Sheets, including Narrow Strip
Steel Container
Air Conditioner
Manufacture of plastics products
Centrifugal Pumps
Manufacture of Fabricated Metal Products, Except Machinery and Equipment
Manufacture of other fabricated metal products
Manufacture of lifting and handling equipment
Manufacture of electronic components
Manufacture of measuring, testing, navigating and control equipment
Salt
Manufacture of Water purifier
Manufacture of Electric heaters
Manufacture of steam generators, except central heating hot water boilers
Manufacture of Fan
Hand tools
Processed rubber
Air Coolers
Manufacture of AC motor
GC/GP sheets
Manufacture Of Electrical Equipment
Industrial Valves

PRICE ADJUSTMENT FOR SERVICE PART (E&C)

- (i) The Contract price shall be subject to price adjustment during performance of the Contract to reflect changes in the cost of labour in accordance with the provisions described below:
- (ii) The price adjustment provisions shall be applicable for price components relating to service part (E&C) as per price break-up furnished by the Contractor.
- (iii) Only following components of the Contract Price will be subject to Price adjustment:
 - (a) Service part (E&C) component of Contract Price.
- (vi) The indices for price adjustment shall be as elaborated hereunder.
- (v) The price adjustment formula for the components of the Contract Price, as mentioned at Sl.No. (iii) above shall be as stipulated hereinafter.

a) Indian Rupee Portion of the Installation Services

$$ER = ER1 - ER0$$

ER1 will be computed as follows:

$$ER1 = ER0 (0.15 + L_b \times (L1 / L0))$$

Where:

1. ER = Adjustment to Erection & Commissioning price component of contract price expressed in Indian Rupees payable to the contractor for each billing.

2. ER1 = Adjusted amount of Erection & Commissioning price component of contract price expressed in Indian Rupees payable to the Contractor.

3. ER0 = Value of the Erection & Commissioning work done in the billing period, which shall be calculated as under:

For the purpose of computing ER0, each Erection & commissioning bill (service part) during the E & C period up to the 'Completion of the Facilities' shall be calculated as described in this document.

4. L_b – Coefficient of labour (for all categories) content in the Indian Rupee portion of the erection & commissioning = 0.85

5. L = Indian field labour index namely, all India consumer price index for industrial workers (All India Monthly Average) as published labour bureau, Shimla, Government of India.

For the indices,

5a. Subscript '0' refers to indices of the Base Month which shall be taken as the month before the month of the price bid opening.

5b. Subscript '1' refers to indices of the month in which service / E&C is carried as per the Purchase Order or its amendments issued.

The latest available indices are to be extrapolated to the above defined month wrt the base month.

Note:

1) The price adjustment i.e. either increase or decrease shall be applicable upto the contractual date of completion of supplies. Contractual delivery/dispatch date would mean the delivery/dispatch date mentioned in the order including amendments in delivery/dispatch date (if any). PVC will not be applicable for the period beyond the contractual delivery/dispatch date where delay is attributable for supplier.

2) The price variation shall be limited to +10% of total E&C price (excluding taxes). There shall be no limit on negative PVC.