Engineering Mechanical

Pre-Qualification Requirements for Ash Handling systems Main Package

1 x 660 MW UPRVUNL Panki TPS

Doc. No: IS-4-PQR-713-300-M001 Rev 02 Date: 13-12-2021

A. **Pre-Qualification Requirement:**

4.18.1 Ash Handling System (Technical)

The bid is open for participation to those bidders who satisfy the following Technical requirements: - The Bidder should be a supplier of ash handling systems and should have executed ash handling systems involving design, engineering, manufacture, supply, erection and commissioning for:

a) Bottom Ash handling system comprising either a jet pump system in conjunction with water impounded Bottom Ash Hopper system designed for the following conveying capacities for pulverized coal fired boilers:

Jet Pump System: 50 tonnes/hour (dry ash basis) or more per jet pump.

The reference Bottom Ash Handling systems should be of the same type i.e. jet pump system, as is being offered by the Bidder.

- b) Pneumatic fly ash handling system for conveying fly ash from ESPs of a single pulverized coal fired boiler unit by:
 - (i) Pressure conveying system designed for 30 TPH or more conveying capacity.

OR

(ii) Vacuum conveying system designed for 30 TPH or more conveying capacity per vacuum extractor.

The reference fly ash handling systems should be of the same type i.e. vacuum system and pressure system, as is being offered by the Bidder.

- c) Pneumatic Fly Ash Transportation System for transporting fly ash from pulverized coal fired boiler unit having capacity of not less than 30 TPH for a conveying distance of not less than 500 meter.
- d) Complete high concentration ash slurry disposal system for handling not less than 40 tons of ash per hour for pulverized coal fired power stations which includes, among others, positive displacement ash slurry pumps & piping system with associated controls.

The systems mentioned at 4.18.1(a), (b) & (c) above should have been in successful operation in at least two (2) plants for at least two (2) years as on 02-Nov-2015. For the purpose of qualification, the experience as at (a), (b), (c) & (d) above in separate plants also is permissible.

An individual boiler unit having its own independent bottom ash handling system of either the jet pump system type can be considered as a plant for meeting the requirement of 4.18.1 (a) above.

An individual boiler unit having its own independent fly ash handling system up to wetting units/ dry dust collection buffer hoppers which includes, among others, independent fly ash handling equipment below ESP hoppers, independent ash conveying piping up to wetting units/ dry dust collection buffer hoppers can be considered as a plant for meeting the requirement of 4.18.1(b) above. Further, a transportation system provided for an individual boiler unit having dedicated transportation vessels below dry dust collection buffer hoppers and dedicated piping from dry dust collection buffer hoppers to storage silos can be considered as a plant for meeting the requirement of 4.18.1(c) above.

For reference fly ash handling systems, the design capacity of conveying from ESPs to buffer hoppers and of transportation from buffer hoppers to storage silos will be the capacity which the client (of the reference plant against which the Bidder is seeking qualification) must have specified in its contract documents.

Engineering Mechanical

Pre-Qualification Requirements for Ash Handling systems Main Package

- 4.18.2 The Bidder who is a supplier of ash handling systems but does not meet the requirements under clause 4.18.1 in part or in full can also participate provided it has executed at least the following systems of ash handling plant involving design, engineering, manufacture, supply, erection and commissioning:
- a) Bottom ash handling system comprising either a jet pump system in conjunction with water impounded Bottom Ash Hopper or submerged scraper chain conveyor system or dry bottom ash system.
- b) Fly Ash Handling System for conveying fly ash from ESPs in dry form (involving pneumatic conveying systems of vacuum or pressure type) or in wet (slurry) form

The systems mentioned at 4.18.2 (a) and (b) above should have been in successful operation in at least two (2) plants for two (2) years as on 02-Nov-2015 and should have been installed for pulverized coal fired boiler units generating not less than 40 TPH of ash per boiler.

And

collaborates/ associates with party(ies) who meet(s) either the total requirement or the balance part under 4.18.1(a), (b), (c) above which the Bidder itself is not able to meet.

In such a case, the Bidder shall be required to furnish a Deed of Joint Undertaking (DJU) jointly executed by the Bidder and the Collaborator(s)/ Associate(s) and each executant of DJU shall be jointly and severally liable to the Owner for successful performance of the relevant system, as per the format enclosed with the bidding documents. The Deed of Joint Undertaking (DJU) should

be submitted at the time of placement of order on approved sub-vendor. In such a case, each Collaborator/ Associate shall be required to furnish an on demand bank guarantee as follows:

- i) INR 1.613 Million (Rupees One Million and Six Hundred and thirteen Thousand) for Collaborator/ Associate for Bottom Ash Handling System
- ii) INR 1.73 Million (Rupees One Million and Seventy-Three Hundred Thousand) for Collaborator/ Associate for Vacuum Conveying System
- iii) INR 3.2 Million (Rupees Three Million and Two Hundred Thousand) for Collaborator/ Associate for Pressure Conveying System
- iv) INR 5.2 Million (Rupees Five Million and Two Hundred Thousand) for Collaborator/ Associate for Pressure Transportation Conveying System.

In case bidder collaborates/associates for more than one system with a party, then the Collaborator/ Associate shall be required to furnish an on demand bank guarantee for an amount arrived at by adding up the amounts for the relevant systems as above.

AND

For clause 4.18.1(d), bidder shall collaborate/associate with an agency who has done design & engineering for high concentration ash slurry disposal system handling not less than 40 TPH of ash for pulverized coal fired power station and the system should have been in successful operation for at least two (2) years

4.18.3 The activity of design and engineering under 4.18.1 (a), (b) & (c) should have been carried out by the Bidder and not through any external design agency/agencies. The activity of design and engineering under 4.18.1 (d) should have been carried out by either the Bidder or through design agency/design agencies having experience for high concentration ash slurry disposal system.

For design and engineering activity referred under paras 4.18.2 the activity should have been carried out by either the Bidder or through design agency/agencies having experience for reference systems.

Engineering Mechanical

Pre-Qualification Requirements for Ash Handling systems Main Package

In case of Collaborator(s)/associate(s) (meeting the balance part of total requirement under clause 4.18.1), the activity of design and engineering for the reference systems should have been carried out by them

Bidder shall submit the following documents along with bid for pre-qualification requirement. Non-submission of below mentioned documents along with bid is liable for rejection. Hence all bidder(s) shall adhere to submission of following documents for meeting Pre-qualification requirement.

- List of experience for the system described above.
- b. Manufacturing facilities, equipment, manpower details duly signed by bidder shall be furnished.
- c. Bidder shall provide documentary evidence in support of his claim for having experience in design, manufacture, testing and supply, E&C, performance of AHP meeting the requirements mentioned in sl. Nos. 4.18.1 or 4.18.2 for Ash Handling Plants which are in operation as on 02-Nov-2015. Following documentary evidence (as given below) for supply of items as mentioned in clause no. 4.18.1 or 4.18.2 shall be submitted along with bid:
- i. Letter of Award (Purchase order copies)
- ii. End customer's address and contact details (ph.no, emails) to be furnished.
- iii. Performance Certificate from Customer
- iv. Approved flow schemes, P&ID, Design memorandum/Design basis reports, Sizing Calculations of Compressors/BA HP water pumps for jet pumps.

d. FORMAT to be filled by Bidder(s):

SI. No	Name of the Project	Brief Scope of the work	Order Ref. No & Date	Date of Completion As per P.O.	Remarks

- B. Pre-Qualification Requirement: (Financial)
- 1. Average annual financial turnover during the last 3 years, ending 31st March 2021, should not be less than Rs.30 crores (Rupees Thirty Crores Only).
- 2. Bidders should submit financial accounts comprising of Audit report, Balance Sheet, Profit & Loss A/c Statement for FY 2018-19, 2019-20& 2020-21. (wherever, the bidders are not required to be audited, they have to furnish balance sheet authorized by Chartered accountant)
- 3. Other Income shall not be considered for arriving at Annual Turnover/Sales
- 4. Financial pre-qualification of the foreign bidder (other than Indian bidders) may also be evaluated on the basis of the report from a reputed third party business rating agency like Dun & Bradstreet, Credit reform etc. The foreign bidder is to submit the report from reputed third party. All Foreign language documents shall be translated to English language either by a certified agency or translated verification by an authorized agency. Credit rating certificate also shall be furnished for financial credibility of the organization.
- 5. For PQ evaluation of foreign bidder, exchange rate (TT selling rate of SBI) as on scheduled date of the tender opening (Part-1 bid in case of two part bid) shall be considered.

C. Important Notes:

- 1. The word "executed" means bidder should have achieved the criteria specified in the above QR even if the total contract is not completed/closed.
- 2. BHEL will provide format for Bank guarantee to the successful bidder.
- 3. Bidder has to submit all credentials/ details, required by the customer for seeking approval of customer. In case customer does not approve the credentials of the bidder, the bidder's offer will be rejected.

Engineering Mechanical

Pre-Qualification Requirements for Ash Handling systems Main Package

Bidder shall submit requisite documentary evidence such as attested copy of award of letter/contract and also completion certificate/performance certificates issued by end user to comply with the above criteria, properly in indexed manner along with the offer. These documents are to be necessarily submitted along with the bid for evaluation.

- 4. Bid document are to be only in English language. The bid supporting documents other than English language are to be supported with translated documents in English certified/attested by embassy of respective country or Indian embassy as applicable. Bilingual certificates if any shall also be vetted by embassy.
- 5. Bidder shall submit the point wise confirmation to the PQR clauses, properly indexed along with the offer.
- 6. For foreign bidder(s), there shall be an authorized representative in India on behalf of the System supplier for single point communication with BHEL for submission of bid/attending bid queries/ bid clarifications, follow up, submission of engineering information in time, dispatches for smooth execution of contract.
- 7. BHEL reserves the right to request for any additional information and also reserves the right to reject the proposal of any bidder, if in the opinion of BHEL, qualification data is incomplete or the bidder is found not qualified to satisfactorily perform the works.
- 8. BHEL reserves the right to assess the capabilities and capacity of the Bidder to perform the contract, should the circumstances warrant such assessment in the overall interest of the Employer.
- Canvassing i.e. soliciting favor, seeking advantage etc. in any form is strictly prohibited and any bidder found to have engaged in canvassing shall be liable to have his bid rejected summarily.
- 10. BHEL reserves the right to:
 - i. Accept or reject any bid received at its discretion without assigning any reasons whatsoever.
 - ii. Postpone the scheduled date without assigning any reason whatsoever.
 - iii. May ask for further qualification during techno commercial scrutiny of bids received and bidder will comply.
 - iv. Evaluation of bidder at their works.
- 11. After technical evaluation of the bidder's offer, the bidder shall be subjected to approval by Customer / Customer's consultant. The bidder who is not approved by customer' customer's consultant will not be considered and their sealed bid price shall not be opened.

-----X-----X