NTPC LTD VDC, RAIPUR		
1	CEG No.	BMD-99
2	Brief description of CEG	Enlistment for Maintenance/Overhauling Contract of Boiler Pressure Parts, Coal Compartment assembly and associated works including HP jet cleaning of Boiler Heating surfaces and Safety Valve Floating.
3	Responsibility Centre	VDC
4	Enlistment category	Category-II (CEGs above Rs 4 Crores and up to Rs 50 Crores)
5	Brief scope of work	Boiler Pressure Parts – Maintenance:
		1. Boiler tube leakage attending as per IBR regulations including all accessories & related works like sky climber and scaffolding installation, coil removal, cutting of tube by grinder, capping of tube etc. in boiler 1st & 2nd pass, and restoration as per original.
		2. Weld joint stress relieving, radiography etc.
		3. Boiler tube shielding, fin welding, refractory application, insulation work.
		4. Overhauling/Servicing/Repairing/ replacement/Preventive maintenance of manual/motorized/pneumatic globe/gate/control valves including all types of safety valves.
		5. Maintenance / replacement of hangers and supports.
		6. Preventive maintenance/ Overhauling/ Break-down maintenance of Water wall soot blowers/LRSB/HRSB etc.
		7. Preventive maintenance/ Servicing/ Break-down maintenance of Fuel firing system including oil guns, filters, SADC, burner tilt etc.
		8. Overhauling/servicing/load testing of Hoists/lifting tools/sky climber.
		9. Fabrication and painting of structures/platforms/approaches as per requirement.
		10. Servicing and maintenance of small pumps/ blowers and accessories of Boiler area including Fuel oil system.
		11. Any type of fabrication and LP welding related to the work package.
		12. Vendor must take proper safety precaution.

- 13. All necessary tools and tackles, ensuring work quality, required for the above work, are to be arranged by the contractor.
- 14. Deployment of experienced supervisor to ensure quality of work.
- 15. Other details of works as per specific site requirement shall be given in Tender documents.

Boiler Pressure Parts - Overhauling:

- 16. Erection/dismantling of Quick Erect Scaffolding (MS/Aluminum) in Boiler 1st Pass and intermediate pass including all related works.
- 17. Erection/Dismantling/Shifting of conventional scaffolding in 1st pass, 2nd pass, dead chambers etc. inside boiler and outside boiler.
- 18. Boiler 1st Pass, 2nd Pass and other working areas illumination with suitable light fittings.
- 19. All preparatory and support services for boiler/Tubes tube NDT works like thickness, hardness, Oxide-layer, MPI, DPT, AET, Borescope, Corrosion Mapping etc.
- 20. Boiler tubes and bends replacement/weld joints in any area of the boiler having tube material like CS, T11, T22, T23, T91, T92, SS etc. by engaging expert Pressure Parts repair group including IBR welders, cutting of tube by grinder, capping of tube and restoration as per original.
- 21. ECO/LTSH/DIV/LTRH/PLATEN/ FSH etc. coil removal/installation, alignment, restoration of tube clamps/connectors etc. as per original.
- 22. Radiography of weld joints and rectification of defective joints.
- 23. Removal and application of castable, pourable & plastic refractory.
- 24. Any type of fabrication and LP welding works.
- 25. Fabrication of tube bends, clamps, lugs, binders, fins, screen, bars etc.
- 26. Stress relieving of high-pressure pipes and tubes of T11, T22, T23, T91, T92 material etc.
- 27. Installation of protection shields, cassette baffles, wire mesh, baffle plates, fin bars etc. at different locations of boiler Pressure

Parts.

- 28. Vendor must take proper safety precautions.
- 29. All necessary tools and tackles, ensuring work quality, required for the above work, are to be arranged by the contractor.
- 30. Deployment of experienced supervisor to ensure quality of work.
- 31. Other details of works as per specific site requirement shall be given in Tender documents.

COAL / OIL BURNERS:

- 1. Removal/ Repair/ Replacement of all coal compartment Assembly (Coal burners tips/body/bends, air nozzles tip, Oil guns and oil burner diffusers) of one boiler this includes all its associated auxiliaries.
- 2. Locking of all coal pipes/ removal of PF bends and burner isolating gates. Removal of oil guns and scanner mountings.
- 3. Bringing new / reclaimed coal nozzles from stacked location and replacement as per condition.
- 4. Servicing/Restoration of oil guns and scanner mountings.
- 5. Servicing, Repair and making smooth operation of burner isolating gate valves/ Burner tilt.
- 6. Replacing of burner panel Top & Bottom refractory retaining plates.
- 7. After replacement, alignment of Coal burner assembly, "0" setting and +/- 30° free movement is required, to be done.
- 8. Removal, repair, and replacement of oil /air tip
- 9. Reclamation of worn-out coal nozzle assemblies for replacement during Unit O/H or S/D by patching/ new SS plates/ Hard-facing of coal nozzle tips, baffle plates, nozzle body etc.
- 10. Other details of works as per specific site requirement shall be given in Tender documents.

HP Jet cleaning of Boiler passes:

- 1. Cleaning of Boiler internal /heat transfer surfaces with high pressure water jet during overhauling.
- 2. The scope of work includes to and fro transportation of sufficient numbers (as mentioned in enquiry) of H.P. jet pumps with accessories from vendor's site to respective boilers.
- 3. Party shall have to mobilize the pumps well in advance from the commencement of work (as intimated by NTPC).
- 4. The total area of all four sides of water walls, Roof tubes, Platen super heater, Division panels, Goose neck, Reheater coils and any other boiler internal surfaces as required.
- 5. Scaffolding/sky climber will be provided by NTPC for accessing the areas to be cleaned.
- 6. Sufficient parallel gangs have to be provided for cleaning the boiler round the clock in pump hours mentioned in tender enquiry.
- 7. Other details of works as per specific site requirement shall be given in Tender documents.

Notes- The vendor must have at least Two nos. of Trolley mounted and 04 nos. of portable HP jet cleaning machines.

Online Pressure Setting for Spring Loaded Safety Valves:

- 1. On-line Pressure Setting for Spring Loaded Safety Valves for entire range of pressure in thermal power plants. (Main Steam, HRH, CRH, DRUM, SEPRATOR, AUX. STEAM Systems).
- 2. On-line setting of Safety Valves using Trevi-Test method as per set values provided by NTPC within \pm 0.5% error of set value.
- 3. Contractor has to get the calibration of his equipment verified by NTPC representative on each occasion before starting of Safety Valve Setting.
- 4. All the adjustments required to be done for setting of Safety Valve are in the scope of contractor and it has to be done in presence of NTPC representative.
- 5. Contractor has to submit valve setting report along with testing graph for each Safety Valve for which setting is done.
- 6. Other details of works as per specific site requirement shall be given in Tender documents.

Notes:

- 1. Execution of the works of "HP Jet cleaning of Boiler Internal Surfaces", "Online pressure setting of Spring Loaded Safety Valves" and "Coal Compartment assembly" may be done by the Agency itself, only if it has the past experience and capability of executing such works in a Boiler of minimum 200 MW capacity or these works may be outsourced to only those sub-vendors who have the past experience and capability of executing such works in a Boiler of minimum 200 MW capacity."
- 2. The approval for execution of Work by the Contractor himself or by his Subcontractor will be subjected to approval of EIC based on submission of experience details by the appointed Contractor for a particular package.

6 Qualifying Requirements

A: Technical Qualifying Requirements:

- 1. The Applicant should possess valid Certificate of recognition as Special Class 'Boiler Repairer/Erector' issued from concerned IBR approving authority of any State/Union Territory of India.
- 2. The Applicant should have executed the work of "Overhauling/ Maintenance/Erection of Boiler pressure parts and associated works" in a Coal Based Thermal Power Station of India with Unit capacity 200 MW or more during the preceding Five (5) years, reckoned as on the date of submission of application.

Notes to Technical Criteria:

- a. Reference work executed by an Applicant as a sub-contractor may also be considered provided the certificate issued by main contractor is duly certified by Owner/ Project Authority specifying the scope of work executed by the subcontractor.
- b. The word "executed" means the Applicant should have achieved the criteria specified in the QR. Even if the total contract is not completed/closed and the contracts is under execution as on date of submission of application, the milestone as specified in QR executed against such contract/order till such date will be considered, provided the same is certified by the Owner/Project Authority.
- c. "Reference works executed by the applicant, as a member of Joint Venture /Consortium / Associate can also be considered provided:
- I. The allocation of scope of work between the partners of the Joint Venture /Consortium / Associate is clearly defined in the executed joint venture agreement / consortium agreement / deed of joint undertaking and the applicant's scope of work and break-up of quantities executed by them as individual contribution in the Joint

Venture / Consortium / Associate, duly authenticated by the Project Authority/Owner, meet the relevant provisions of eligibility criteria.

II. In case the reference work has been executed by the applicant in an integrated joint venture wherein allocation of scope of work and break-up of quantities between the partners is not clearly specified in the integrated joint venture agreement, then for establishing the eligibility as per Clause A (above) of Technical Qualifying Requirements, the credit of executed quantities can be claimed by the applicant in the ratio of applicant's share in the integrated joint venture agreement, provided the applicant establishes that it regularly undertakes works mentioned in QR. The executed works/ quantities by the integrated joint venture shall be duly authenticated by the Project Authority/owner."

B. Financial Criteria:

1.0 Net worth of the Applicant should not be less than 100% (hundred percent) of its paid-up share capital as on the last day of the preceding financial year reckoned as on date of submission of application.

In case the Applicant does not meet the Net worth criteria on its own, it can meet the requirements of Net worth based on the strength of its Subsidiary(ies) and/or Holding Company and/or Subsidiaries of the Holding Companies, wherever applicable. In such a case, however the Net worth of the Applicant and its Subsidiary(ies) and/or Holding Company and/or Subsidiaries of the Holding Companies, in combined manner should not be less than 100% of their total paid up share capital. However individually, their Net worth should not be less than 75% of their respective paid-up share capitals.

Net worth in combined manner shall be calculated as follows:

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% (Seventy-five percentage) of the respective paid-up share capitals and Y1, Y2, Y3 are individual paid up share capitals.

- 2.0 In case the Applicant is not able to furnish its audited financial statements on stand-alone entity basis, the unaudited unconsolidated financial statements of the Applicant can be considered acceptable provided the Applicant further furnishes the following documents for substantiation of its qualification:
- I. Copies of the unaudited unconsolidated financial statements of the Applicant 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 application documents, stating that the unaudited unconsolidated financial statements form part of the Consolidated Annual Report of the company.
- III. In cases where audited results for the last preceding financial year as on the date of submission of Application are not available, the financial results certified by a practicing Chartered Accountant shall be considered acceptable. In case, Applicant is not able to submit the Certificate from 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 submission of application and the Certificate from the practicing Chartered Accountant certifying the financial parameters is not available.

Notes for Clause 1.0 of Financial Criteria above:

- 1. Net worth means the sum total of the paid-up share capital and free reserves. Free reserves mean 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.
- 2. Other income shall not be considered for arriving at annual turnover.

C: Document to be submitted by Applicant in support of meeting QR:

- 1. Valid IBR approval letter/certificate with endorsement from any State/Union Territory Statutory Authority.
- 2. Relevant and legible PO copies with detailed scope of work, terms and conditions, BOQ (issued within last Five (05) years reckoned as on date of submission of application) in support of award and copy of Client's Completion certificate/RA Bill/ final deviation statement from the concerned client /copies of invoice to establish successful execution as per QR.

D: Additional Documents to be submitted:

In addition to the documents required in support of meeting technical requirements as stated above, following documents are required to be submitted by the applicants applying for enlistment: -

- 1. NSIC / SSI / MSME registration certificate, if applicable.
- 2. PF & GST/Service Tax registration certificate from the concerned excise department / any other statutory document.
- 3. Audited balance sheet including Profit & Loss statement for the previous three completed financial years reckoned from the date of application. In case the audited documents are not ready / available, then certified copy by a registered practicing Chartered accountant may be submitted.
- 4. Any other documents in addition to the above which the applicant wants to submit for enlistment.
- 5. NTPC can ask other documents as necessary during evaluation.

Note: The terms and conditions as above shall supplement/amend the Standard Terms & Conditions (STC) uploaded in the VDC portal (https://vdc.ntpc.co.in/UploadedFiles/Documents/STC.pdf). Wherever there is a conflict, the provisions in this document shall prevail over those in the STC.