

Qualifying Requirement for Vendor Enlistment for ‘Mega Contract for Mechanical Maintenance of offsite equipment (Category 1)’.

A	CEG Details		
		CEG No.	OFF-11
		CEG DESCRIPTION	Mega Contract for Mechanical Maintenance of offsite equipment
		RESPONSIBILITY CENTRE	CPG-1/ VDC
B	<p>TECHNICAL CRITERIA OF QR:</p> <p>a. The applicant should have executed mechanical <i>maintenance contract</i> of Boiler*/Turbine**/BOPs*** of 500 MW or above capacity Power Plant for a period of one year or more within preceding 05 (five) years from the date of application.</p> <p>OR</p> <p>b. The applicant should have executed erection and commissioning of ‘<i>at least one unit of Boiler* /Turbine** / ‘BOPs***</i>’ of Power Plant having capacity 500MW or above within preceding 05 (five) years from the date of application.</p> <p>NOTES:</p> <ol style="list-style-type: none"> 1. The word “Executed” mentioned above means that the applicant should have achieved the criteria specified above, even if the total contract is started earlier and/or is not completed/closed. 2. Reference work executed by the applicant as a sub-contractor may also be considered provided the certificate issued by main contractor is duly certified by owner specifying the scope of work executed by the sub-contractor in support of qualifying requirements. 3. *** Mechanical Maintenance Contract of BOPs (Balance of Plant) should include mechanical maintenance of ‘CW Pump House’, ‘Fire Fighting System’, ‘Water treatment Plant’, ‘HVAC system’, ‘Compressed air system’ and ‘Cooling Tower’. <i>Maintenance of all these systems in any combination, may be executed through one contract or more than one contract(s).</i> 4. *** Erection and commissioning of BOPs (Balance of Plant) should include any of the following systems i.e., CW Equipments/Fire Fighting System/Water treatment Plant/ HVAC system/ Compressed air system/ Cooling Tower. 5. **Turbine ‘<i>Mechanical Maintenance / Erection and commissioning</i>’ should include “HPT and/ or IPT and/ or LPT”. 6. *Boiler ‘<i>Mechanical Maintenance / Erection and commissioning</i>’ should include “boiler pressure parts”. 		

<p>C</p>	<p>Documents to be submitted as proof of meeting the stipulated Qualifying Requirements as stated at B) above</p> <p>Relevant PO copy and client's completion certificate/RA bill/Final deviation statement.</p>
<p>D</p>	<p>Other Documents to be uploaded: In addition to the documents required in support of Qualifying Requirements as stated at C) above, following documents are also required to be uploaded by the applicants applying for enlistment: -</p> <ol style="list-style-type: none"> 1. Three POs of the highest executed values of similar works during previous five years from the date of application. Copy of completion certificate/RA bill from the concerned client in support of successful execution of works against each of the POs to be submitted. 2. Financial Statement: <ol style="list-style-type: none"> a) In case of proprietorship and partnership firm having turnover more than one crore and companies incorporated as per company act 2013: audited *financial statements for the previous/preceding three completed financial years reckoned from the date of application. b) For proprietorship and partnership firm having turnover less than one crore: certified copy of financial statements by a registered practicing-chartered accountant for the previous/preceding three completed financial years reckoned from the date of application. c) Audited balance sheet including Profit & Loss statement for the previous three completed financial years reckoned from the date of application. In case the audited result for the preceding financial year is not available, certification of financial statements from a practicing-chartered accountant is to be uploaded. In case, applicant 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 years shall be considered for evaluating the financial parameters. Further, a certificate would be required from the CEO/CFO stating that the financial results are under audit as on date of application and certificate from the practicing chartered certifying the financial parameters are not available. <p>Note: *Financial statement means/includes balance sheet, profit and loss account /income and expenditure account, cash flow statement, statement of changes in equity and any explanatory note annexed to the same.</p>

	<p>3. NSIC / SSI / MSME registration certificate, if applicable.</p> <p>4. GST registration.</p> <p>5. Any other documents in addition to the above which the applicant wants to submit.</p> <p>NTPC can ask more documents if felt necessary.</p>	
E	<p>Note-1</p>	<p>Similar works means:</p> <ol style="list-style-type: none"> 1. Mechanical <i>maintenance contract</i> of Boiler*/Turbine**/BOPs*** of 500 MW or above capacity Power Plant for a period of one year or more. <p>OR</p> <ol style="list-style-type: none"> 2. Erection and commissioning of '<i>at least one unit of Boiler* /Turbine** / 'BOPs***</i>' of Power Plant having capacity 500MW or above. <p>Notes:</p> <ol style="list-style-type: none"> 1. *** Mechanical Maintenance Contract of BOPs (Balance of Plant) should include mechanical maintenance of 'CW Pump House', 'Fire Fighting System', 'Water treatment Plant', 'HVAC system', 'Compressed air system' and 'Cooling Tower'. <i>Maintenance of all these systems in any combination, may be executed through one contract or more than one contract(s).</i> 2. *** Erection and commissioning of BOPs (Balance of Plant) should include any of the following systems i.e., CW Equipments/Fire Fighting System/Water treatment Plant/ HVAC system/ Compressed air system/ Cooling Tower. 3. **Turbine '<i>Mechanical Maintenance / Erection and commissioning</i>' should include "HPT and/ or IPT and/ or LPT". 4. *Boiler '<i>Mechanical Maintenance / Erection and commissioning</i>' should include "boiler pressure parts".
	<p>Note-2</p>	<p>(a)Value means basic value of the PO. Where PO value is composite (i.e., including service taxes etc.), the applicant has to give break up of composite PO value mentioning basic value, taxes etc. Any separate reimbursement/escalation shall also not be considered.</p>

		<p>(b) In case of Composite purchase order:</p> <p>(i) If items can be identified in BOQ then executed value will be drawn from relevant BOQ items,</p> <p>(ii) or else, if items are in one scope of work comprises of N number of items out of which S number of items in scope is matching then:</p> <p>Executed value = Total composite value of Contract x S/N</p>
F	QUALITY PLAN (IF APPLICABLE)	NOT Applicable
G	Category of Enlistment	CATEGORY-1
H	SCOPE OF WORK	<p>1.0 SCOPE OF WORK</p> <p>Scope of the work covers Mechanical Maintenance of Cooling Towers, CW pumps, Water treatment plant, Chlorination Plant, CW Chemical Treatment Plant, Liquid Waste Treatment Plant (LWTP), Effluent Treatment Plant, Drinking Water System, Sewage Treatment Plant, Fire Detection & Protection System, Raw Water/Make up Water System, HVAC system and any other Offsite area related to Water Systems and water treatment.</p> <p>Mechanical Maintenance of above systems should include repair / replacement of pumps (both Horizontal & Vertical pumps), gear boxes, Chillers, VAMs, pipeline/ducts, valves, agitators, tanks, Travelling Water Screen, hoists, EOT, Rubber lining works and Under water inspection works etc.</p> <p>2.0 Detailed Scope of Work:</p> <p>2.1 Area of work - Cooling Towers: Maintenance of Cooling Tower Equipment, Internals, Pipelines and associated works including miscellaneous works such as cleaning of Columns and Beams, Cold basin cleaning, Outlet gates etc. as per following:</p> <ol style="list-style-type: none"> 1. The bearing clearances to be measured with dial gauge by deflection of fan blades. 2. Replacement of bearings for which clearance is beyond acceptable limit. 3. Check / replace of gear internals of the gear box. 4. Check and do alignment of gear box with motor. 5. Inspect / Replace the gear box oil, if need be. 6. Check and correct fan blade angle to the design value. 7. Inspect / Grease / service main and riser valves. 8. Repair of CT outlet gates and screen / bucket strainers. 9. Repair of Monorail beam for lifting of CT outlet gates / screen. 10. Cell doors to be repaired if required and sealed with rubber sheet / conveyor belt.

11. Inspect / Replace cracked / damaged fan blades.
12. Inspect / repair / replace of monorail beam required for lifting gear box.
13. All the materials, scraps after the work to be removed and taken to a place as directed by EIC.
14. Trial run would be taken after completing all the jobs and needful action would be done in case of vibration, high oil temp etc.
15. Isolation of cells, arranging safe approach, Scaffolding platform inside cell, Providing top surface protection of Fills
- 16(a) Inspection / replacement of choked / fallen nozzles, Drift Eliminators, Fills (PVC V bars / PP grids / Film Packs) creating access to the spray chambers of the cell
- 16(b). Repair of damaged water distribution pipe couplings, end caps, pipe joints, riser pipes & valves with hot water duct / channel.
- 17(a). Cleaning the fill packs by water jet from top / bottom as instructed of EIC.
- 17(b). The choked film packs need to be removed, weighed, dried, tapped and replaced in position if found usable, otherwise new pack to be installed.
18. Lifting and weighing of fill packs before and after cleaning.
19. Cleaning of cell RCC structures, columns, support channel.
20. Repair / replace the defective SS channels / Supports as per the standard practice.
21. Recharging of cells after refixing the fill packs and nozzles etc.
22. Removal of damaged / scrap fills to scrap yard and made the area clean as per instruction of EIC.
23. Area around CT (pavement area + staircase area) to be cleaned after recharging.
24. Other details of works shall be given in tender documents.

2.2 Area of work - Rubber Lining Works in Acid & Alkali Handling Tanks & Pipelines:

1. Checking the health of rubber lining in DM Plant tanks and vessels using spark-testing machine and chore hardness by agency in presence of NTPC representative.
2. Erection of scaffolding as required for inspection of tanks, vessels of Bulk Acid Storage Tanks (BATs) & DM streams and pipelines as per site requirement.
3. Removal of existing rubber lining, surface preparation by sand blasting / buffering / wire brushing, re-rubber lining to be done in specified layers / thickness.
4. After steam curing, spark testing and the shore hardness test of the new rubber lining to be done. Shore Hardness should be 60 +/- 5. The spark test and shore hardness test machine are to be brought by the contractor.
5. Necessary steam line shall be erected by the agency for which the required pipe will be in NTPC scope on free of cost basis, which has to be returned to NTPC after completion of the job.
6. All fittings, ladder, platforms etc. removed before work shall be fitted back after completion of the rubber lining.
7. If any patch work is required, agency will do the job of cutting and welding of plate, pipe etc. Welding m/c / gas cutting set etc. will be provided by agency.

8. Removal and disposal of scrap, old rubber scraps after completion of the work, at a location identified by engineer-in-charge, will be responsibility of the agency.
9. The agency shall submit test certificates of natural rubber & rubber solution used in rubber lining. Separate test certificates will be required for each lot of materials.
10. 24 V transformers and suitable lights shall while working inside the tanks.
11. Arrangement of exhaust fans for sufficient ventilation of the tanks is to be arranged by the agency.
12. Skilled manpower who are conversant with such job should only be deputed.
13. Other details of works shall be given in tender documents.

2.3 Area of work - Maintenance of CW pumps & it's associated duct, valves TWS, EOT etc.

1. Maintenance / Overhauling of CW Pumps, Bearings and associated duct, valves & actuators, Travelling Water Screen, EOT, Trash Rack, Stop Lock Gates etc.
2. Other details of works shall be given in tender documents.

2.4 Area of work - Misc. Pump & Equipment Maintenance including Fire Water Pumps, Raw Water/Make up Water Pumps, Lub Water Pumps, Sump Pumps, Fire Fighting System, Fire Detection & Protection System etc. including repair / replacement of pipeline, valves, hoists etc

1. Maintenance/Overhauling of pumps and its accessories for Fire Water Pumps, Raw water / Make up water pumps, lub water pumps, Sump pumps, Fire Detection & Protection system etc.
2. Cleaning / repair of Strainers, Trash rack, Stop Lock Gates Pit/ Sump, hoists etc.
3. Works related to Fire Detection & Protection System.
4. Repair / replacement of pipelines, Butterfly valves, gate valves, Air Release Valves, strainers, detectors, quartz bulbs, sprinklers, deluge valves etc for above systems at 1.
5. Other details of works shall be given in tender documents.

2.5 Area of work - Maintenance of Equipment, Tanks & Vessels and associated works for complete Water Treatment Plant comprising of DM Plant, PT Plant, Chlorination Plant, CW Chemical Treatment Plant, LWTP, Effluent Treatment Plant, Drinking Water System, Sewage Treatment Plant

1. Maintenance of complete Water Treatment Plant comprising of PT & DM Plant / Desalination Plant, Chlorination Plant, CW Chemical Treatment Plant, LWTP, Effluent Treatment Plant, Drinking Water System, Sewage Treatment Plant.
2. Repair / replacement of pumps, pipelines, tanks, Clariflocculator/Clarifier, Butterfly valves, Gate valves, Diaphragm valves etc for above systems at 1, as applicable.
3. Other details of works shall be given in tender documents.

		<p>2.6 Area of work - Under Water Services for Offsite Area</p> <ol style="list-style-type: none">1. Under water "Inspection and sealing of CT outlet or CW fore bay Gate / Cleaning of OAC or CW pump suction / fore bay or RW/MU water well / desilting chamber" work by engaging divers/machines in thermal power plants.2. Skilled manpower who are conversant with such job should only be deputed.3. Other details of works shall be given in tender documents. <p>2.7 Area of work – Heating, Ventilation and Air Conditioning</p> <ol style="list-style-type: none">1. Overhauling and Breakdown maintenance of chillers up to 350 TRs, Maintenance of VAM up to 350 TRs, Servicing of AHU, Air Washer Blower, Package ACs, Condenser water pump, Chilled water pump and AC Cooling towers.2. Round the clock Operation monitoring of Air conditioning system at different locations.3. Other details of works shall be given in tender documents.
--	--	--