## **NTPC Limited**

## Vendor Development Cell, CPG-1, Nava Raipur

# Qualifying Requirement (QR) and Scope of Work (SOW) for Vendor Enlistment for CEG: OFF-09 (Category-1)

Α	CEG Details			
		CEG No.	OFF-09 (Category-1)	
		CEG DESCRIPTION	Mechanical Maintenance of Offsite Systems	
		AREA OF WORK	CW pumps, Fire Detection & Protection System, Raw Water / Make up / Intake Water System, Service Water system, Cooling Towers, DM water system, miscellaneous pumping systems, piping & equipment etc., Under water Inspection, repair and sealing works of Cooling Tower outlet / CW fore bay Gate / Cleaning of OAC / CW pump sump / RW / MU water sump work.	
		RESPONSIBILITY CENTRE	CPG-1/ VDC	
В	TECHNICAL CRITERIA OF QR:			
	<ul> <li>B.1 The applicant should have executed the work (as per B.1.1 / B.1.2) in 500MW or above capacity power plant as under:</li> <li>B.1.1 Mechanical Maintenance works of one year or more, in preceding 05(five) years from the date of application, which includes any of the following:</li> </ul>			
	(i) CW Pumps			

- (ii) Boiler and/or its auxiliaries
- (iii) Turbine and/or its auxiliaries

#### OR

- **B.1.2** Erection & commissioning works which includes any of the following:
- (i) CW Pumps
- (ii) Boiler and/or its auxiliaries
- (iii) Turbine and/or its auxiliaries

#### **NOTES:**

C

- I. 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.
- II. 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.
- III. Applicant shall submit an undertaking in the attached format that the work of 'Underwater inspection and/or repair works' shall be executed by himself or by his sub-contractor who meets the requirement detailed under SI no. 2.4 of SOW, Annexure-I.

Documents to be submitted as proof of meeting the stipulated Qualifying Requirements as stated at B) above:

Relevant PO copy and client's completion certificate/RA bill/Final deviation statement.

Other Documents to be uploaded:

In addition to the documents required in

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: -

- 1. Three POs of the highest executed values of **Similar Works**. 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. 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 Accountant certifying the financial parameters are not available.
- 3. In case the applicant is not able to furnish its audited financial statements on standalone 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.
  - (a) Copies of the unaudited unconsolidated financial statements of the applicant along with copies of the Audited consolidated financial statements of its Holding Company.
  - (b) A Certificate from the CEO/CFO of the Holding Company, as per the format enclosed in the bidding documents, stating that the unaudited unconsolidated financial statements form part of the Consolidated Annual Report of the company.

#### Note:

- (i) Maximum Three Credential Order(s) / Similar Work(s) shall be considered for calculation of the EC.
- (ii) All other terms & conditions of enlistment are as per the STC available at VDC portal <a href="https://vdc.ntpc.co.in">https://vdc.ntpc.co.in</a>

NTPC may ask for more / shortfall documents, if any.

E	NOTE-1	Similar works means: Criterion mentioned at Sl. No. B above	
	NOTE-2	a) Value means basic value of the PO. Where PO value is	
		composite (i.e., including taxes etc.), the applicant has to give	
		break up of composite PO value mentioning basic value, taxes	
		etc.	
F	QUALITY PLAN (If Applicable)	NOT APPLICABLE	
G	Category of Enlistment	CATEGORY-1 (Up to 4 Crore)	
Н	SCOPE OF WORK	1.0 SCOPE OF WORK	
		Scope of the work covers Mechanical Maintenance of various	
		Offsite systems like CW pumps, Fire Detection & Protection	
		System, Raw Water/Make up/Intake Water System, Service	
		Water system, Cooling Towers, DM water system,	
		miscellaneous pumping systems, piping & equipment etc.	
		Mechanical Maintenance of above systems include	
		Maintenance (Preventive / Breakdown / Replacement /	
		Overhauling) of pumps (both Horizontal & Vertical pumps),	
		gear boxes, pipeline/ducts, valves, agitators, tanks, Travelling	
		Water Screens, trash racks, Stoplogs, hoists/EOT etc.	
		Under water Inspection, repair and sealing works of Cooling	
		Tower outlet / CW fore bay Gate / Cleaning of OAC / CW pump	
		sump / RW/MU water sump is also included in scope of work.	
		2.0 Detailed Scope of Work:	
		2.1 Area of work - Maintenance of CW pumps & it's associated	
		duct, valves TWS, EOT etc.	

- Maintenance / Overhauling of CW Pumps, lub pumps and associated duct, valves & actuators, Travelling Water Screen, EOT, Trash Rack, Stop Log Gates etc.
- 2. Other details of works shall be given in tender documents.
- 2.2 Area of work Raw Water/Make up Water Pumps, Fire Detection & Protection System, Service water system, drinking water system, DM water system, air lines, Misc. Pumps & Equipment etc. including repair / replacement of pipeline, valves, hoists etc.
- 1. Maintenance/Overhauling of pumps and its accessories for Fire Detection & Protection System, Raw water / Make up water pumps, lub water pumps, Sump pumps etc.
- 2. Cleaning / repair of Strainers, Travelling Water Screens, Trash rack, Stop Log Gates, Pit/ Sump, hoists etc.
- 3. Repair / replacement of pipelines, Butterfly valves, gate valves, Air Release Valves, strainers, detectors, quartz bulbs, sprinklers, deluge valves etc.
- 4. Other details of works shall be given in tender documents.
- **2.3 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:
- 1. Check / replace internals of the gear box.
- 2. Check and do alignment of gear box with motor.
- 3. Inspect / Replace the gear box oil, if required.
- 4. Check and correct fan blade angle to the design value.
- 5. Inspect / Grease / service main and riser valves.
- 6. Repair/cleaning of CT outlet gates and screen / bucket strainers.

- 7. Repair of Monorail beam for lifting of CT outlet gates / screen.
- 8. Cell doors to be repaired if required and sealed with rubber sheet / conveyor belt.
- 9. Inspect / Replace cracked / damaged fan blades.
- 10. Inspect / repair / replace of monorail beam required for lifting gear box.
- 11. All the materials, scraps after the work to be removed and taken to a place as directed by EIC.
- 12. Trial run would be taken after completing all the jobs and needful action would be done in case of vibration, high oil temp etc.
- 13. Isolation of cells, arranging safe approach, Scaffolding platform inside cell, Providing top surface protection of Fills
- 14. (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
  - (b). Repair of damaged water distribution pipe couplings, end caps, pipe joints, riser pipes & valves with hot water duct / channel.
- 15. (a) Cleaning the fill packs by water jet from top / bottom as instructed of EIC.
  - (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.
- 16. Lifting and weighing of fill packs before and after cleaning, as applicable.
- 17. Cleaning of cell RCC structures, columns, support channel.
- 18. Repair / replace the defective SS channels / Supports as per the standard practice.
- 19. Recharging of cells after refixing the fill packs and nozzles etc.

- 20. Removal of damaged / scrap fills to scrap yard and made the area clean as per instruction of EIC.
- 21. Area around CT (pavement area + staircase area) to be cleaned after recharging.
- 22. Minor Civil works in Cooling towers like chipping, concrete breaking etc., if required.
- 23. Other details of works shall be given in tender documents.

#### 2.4 Area of work - Under Water Services for Offsite Area

- 1. Under water "Inspection and sealing of Cooling Tower outlet / CW fore bay Gate / Cleaning of OAC / CW pump sump / CW fore bay / RW/MU water sump" work by engaging divers & safety equipment 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.

#### Notes for Sl. no. 2.4:

1. The work of 'underwater inspection and/or repair' shall be executed by agency himself or by his sub-contractor who meets the following requirement:

The applicant / his Sub-contractor should have executed work of 'underwater inspection and/or repair works'

2. The approval for execution of work by the agency himself or his Sub-contractor will be subjected to approval of EIC based on submission of relevant documents issued by Client (Relevant PO copy and client's completion certificate/RA bill/Final deviation statement) to establish aforesaid criterion. All submitted documents shall be TPIA/ISA certified.

# PROCESS

- Subject enlistment is for enlistment of vendors for the work of Mechanical Maintenance in Offsite systems comprising of
  - a) CW pumps, Fire Detection & Protection System, Raw Water/Make up/Intake Water System, Service Water system, Cooling Towers, DM water system, miscellaneous pumping systems, piping & equipment etc.
  - b) Under water Inspection, repair and sealing works of Cooling Tower outlet / CW fore bay Gate / Cleaning of OAC / CW pump sump / RW/MU water sump work.
     (Also Refer Annexure-I for scope of work)
- 2) At the time of enlistment, applicant should submit undertaking in the attached format that the work of 'underwater inspection and/or repair' shall be executed by himself or by his sub-contractor who meets the requirement mentioned under SI no. 2.4 of SOW, Annexure-I.
- 3) Applicants who meet QR criteria at Sl. No. 'B' and submit undertaking for underwater inspection and/or repair works in attached format shall only be enlisted.
- 4) Enlisted vendors as per their execution capability (EC) will be issued tender enquiries for station specific packages. The scope of work of these tenders will generally comprise as detailed in Annexure-I (scope of work) under the station specific tender(s). (Refer SI no. 2.1, 2.2, 2.3 and 2.4 of SOW, Annexure-I).

5) After award of work of station specific package, the successful contractor will be required to submit the credentials in respect of criteria to be met by contractor or by his proposed sub-contractor as per provisions of SI. No. 2.4 of SOW (Refer Annexure-I) regarding underwater inspection and/or repair works, as mentioned below:

#### Quote

1. The work of 'underwater inspection and/or repair' shall be executed by agency himself or by his sub-contractor who meets the following requirement:

The applicant / his Sub-contractor should have executed work of 'underwater inspection and/or repair works'.

2. The approval for execution of work by the agency himself or his Sub-contractor will be subjected to approval of EIC based on submission of relevant documents issued by Client (Relevant PO copy and client's completion certificate/RA bill/Final deviation statement) to establish aforesaid criterion. All submitted documents shall be TPIA/ISA certified.

### **Annexure-I**

# PROFORMA OF "UNDERTAKING FOR UNDERWATER INSPECTION AND/OR REPAIR WORKS" (TO BE SUBMITTED BY APPLICANT ALONG WITH ENLISTMENT APPLICATION)

NAME OF ENLISTMENT APPLICATION				
NAME OF APPLICANT				
(a) We, the undersigned, submit our approximately named application, in full conformity with				
(b) Regarding work of 'underwater inspective criterion mentioned in Scope of work a				
"1. The work of 'underwater inspection and himself or by his sub-contractor who m				
The applicant / his Sub-contractor showing inspection and/or repair works'	uld have executed work of <b>'underwater</b>			
2. The approval for execution of work by the agency himself or his Sub-contractor will be subjected to approval of EIC based on submission of relevant documents issued by Client (Relevant PO copy and client's completion certificate/RA bill/Final deviation statement) to establish aforesaid criterion. All submitted documents shall be TPIA/ISA certified."				
(c) We hereby undertake that the work of 'underwater inspection and/or repair works" shall be executed by us or our sub-contractor who meets the requirement mentioned under scope of work (Annexure-I). In this regard, required documents shall be timely submitted for approval of Engineer-In-Charge (EIC) before execution of work.				
	Signature			
Date	Name			
Place	Designation			