



**OWNER:**

**THE TATA POWER COMPANY LIMITED**

**TITLE OF WORK TO BE AWARDED:**

**Services for ACW & CCCW system Overhauling during Unit 50 Outage**

**at**

**Mundra Thermal Power Station (MTPS), Gujarat**

**ENQUIRY REFERENCE NO.: 2500018109**

## NOTICE INVITING EXPRESSION OF INTEREST (EOI)

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|---|
| <b>Enquiry reference no.:</b> 2500018109  |
| <b>Title of Work:</b> Services for ACW & CCCW system Overhauling during Unit 50 Outage at Tata Power-Mundra.  |
| <b>Type of Bidding:</b> E-tendering (through Ariba online portal) / Two Part (Technical and Price bids under separate envelopes)  |
| <b>Contact Details:</b> All communication including EOI submission shall be addressed to following officer/s:<br>Name: Mr. Premkumar G<br>Email: <a href="mailto:premkumar@tatapower.com">premkumar@tatapower.com</a><br>Copy of all communications shall be marked to (Cc):<br>Name: Mr. Anil Agarwal<br>Email: <a href="mailto:anil.agarwal@tatapower.com">anil.agarwal@tatapower.com</a> |

The Tata Power Company Limited Invites Expression of Interest (EOI) from interested parties for the Two-Part e-Tendering Process of following Relevant Work Package:

**Table 1 - Tender Summary**

| <b>Package Details</b>   | <b>Tender Fee</b>   | <b>Bid Security</b>   |
|--|---|---|
| Services for ACW & CCCW system Overhauling during Unit 50 Outage at Tata Power-Mundra. | INR 2000/- (INR Two Thousand Only).<br><i>To be submitted along with EOI.</i> | INR 40,000/- (INR Forty Thousand Only).<br><i>Bid Security to be submitted as a Bank Guarantee or RTGS or Demand Draft at the <b>BID stage and not with EOI</b></i> |

### **1. INTRODUCTION:**

The Tata Power Company Limited (TPCL) is among the largest private sector Power Utility companies in India with presence in Generation, Transmission and Distribution of Power through conventional and renewable sources.

Mundra Thermal Power Station (A Tata Power Division) has implemented the 4150 MW UMPP near the port city of Mundra in the state of Gujarat in India. This UMPP is India's first 830 MW unit thermal power plant using supercritical technology. MTPS operates on imported coal on pulverized coal-based boiler technology. The generating plant is in Tunda village of Mundra district in the state of Gujarat, India.

The tendering activities for this Project are being managed from Tata Power's following Office:

The Tata Power Company Limited,  
Mundra Thermal Power Station - Ultra Mega Power Plant,  
(Formerly a Unit of Coastal Gujarat Power Limited),  
Tunda-Vandh Road, Tunda Village,  
Mundra, Kutch 370 435, Gujarat.

## **2. SCOPE OF WORK:**

### **2.1 ACW system MSRL pipe inspection:**

- Scaffolding erection for dismantling of piping and/valves for internal inspection. Scaffolding materials will be with contractor scope. Good quality scaffold materials to be used.
- Dismantling of piping flanges by unscrewing bolts. Cleaning/rust removal liquid (WD 40, Rustolene, etc.); to be used will be in contractor scope.
- Loosening of fasteners to be done instead of cutting. Cutting of fasteners to be done wherever required using cutting wheels. (Considering rubber lining gas cutting to be avoided or minimized). Suggestions to be seek from MTPS engineer before cutting of fastener using cutting wheels or by gas cutting.
- Vendor to remove/re-install both ACW SCS.
- Internal cleaning of piping for internal inspection and repair. Hoses required will be in contractor scope.
- Heavily damaged pipe spools to be removed from position and repairing with all respect to be done by contractor. Loading and unloading of pipe spools and valves will be done by contractor for rubber lining/repair by external agency.
- Minor repair of MSRL pipes to be done at site by contractor. Require repair rubber compound/putty etc.; will be provided by MTPS.
- 100% internal inspection of piping to be done by contractor.
- Vacuum pump cooler line piping to be removed from location for internal and external inspection.
- Vendor must provide temporary blasting shed near ACW room for coating of vacuum pump cooler line. Material for blasting shed will be in vendor's scope.
- Vendor must ensure proper covering of blasting shed to avoid any dust pollution in nearby areas.
- Wooden slippers Chain blocks, wire rope slings, lifting belts, D-shackles, etc.; will be in contractor scope.
- Hydra will be in contractor scope.
- Repair of pipe spools with flanges, patch work, modification in existing piping to be done by contractor.
- Cleaning of fasteners using good quality cleaning agents for reuse.
- Grease to be applied on each bolt and nut before tightening. Grease to be provided by MTPS.
- Restoration of system after 100% internal inspection and repair. Grease to be applied in fasteners during restoration. Required gaskets and fasteners (after consuming the old fasteners in good condition) to be provided by MTPS.
- All required general tools and tackles, lifting tools and tackles, fixtures and other materials and welding machine, grinding machine etc.; will be with contractor scope.
- Shifting of materials from MTPS warehouse to site will be done by contractor. Vehicle required will be with contractor scope.
- Repair for pipes, where welding is required will be done by Vendor. All Electrical equipment like welding machine, grinding machine, distribution board will be in scope of Vendor.

- All electrical equipment must be certified by MTPS-EMD. Vendor has to comply for all electrical requirements as instructed by M/s MTPS-EMD.

**List of rubber lined piping to be inspected:**

| <b>Piping description</b>                                  | <b>Size (NB)</b> | <b>Length mtr (approx.)</b> |
|--|------------------|-----------------------------|
| ACW pump suction header up to bypass line                  | 800              | 12                          |
| ACW pump suction branch piping                             | 700              | 12                          |
| ACW pump discharge branch piping                           | 600              | 15                          |
| ACW pump discharge piping including bypass line up to SCS. | 800              | 40                          |
| PHE ACW I/L header   | 800              | 10                          |
| PHE I/L piping (Branch)                                    | 550              | 12                          |
| PHE O/L piping (Branch)                                    | 550              | 15                          |
| PHE ACW O/L header   | 800              | 40                          |
| ACW O/L line to Initial filling valve (DF-1A)              | 600              | 25                          |
| ACW O/L line to Initial filling valve (DF-2B)              | 600              | 25                          |
| DF back wash line up to initial filling valve              | 300              | 50                          |
| ACW tap off (from DF) header                               | 800              | 50                          |
| Vacuum pump cooler I/L and O/L line                        | 200              | 150                         |
| Vacuum pump O/L common line                                | 250              | 25                          |
| Vacuum Pump I/L and O/L line (individual)                  | 150              | 70                          |

List of drawings to be considered for reference:

- TCE.5146A-590-LP-00-017
- TCE.5146A-590-LP-00-018
- TCE.5146A-590-LP-00-019
- TCE.5146A-590-LP-00-021
- TCE.5146A-590-LP-00-009
- TCE.5146A-590-LP-00-097
- TCE.5146A-590-LP-00-098
- TCE.5146A-590-LP-00-124
- TCE.5146A-590-LP-00-137

**2.2 Inspection and repair (removal and re-installation) of butterfly valves:**

- Scaffolding erection for demounting of valves for internal inspection. Scaffolding materials will be with contractor scope. Good quality scaffold materials to be used.
- Dismantling of piping flanges by unscrewing bolts. Cleaning/rust removal liquid (WD 40, Rustolene, etc); to be used will be in contractor scope.
- Demounting of actuators for motorized valves and re-mounting of same after work completion.
- Removal of butterfly valves from position to do internal inspection. Loosening of fasteners to be done instead of cutting. Cutting of fasteners to be done wherever required using cutting wheels. (Considering rubber lining gas cutting to be avoided or minimized).

Suggestions to be seek from MTPS engineer before cutting of fastener using cutting wheels or by gas cutting.

- Removal of butterfly valves using chain blocks, or by any lifting arrangement. Hydra required will be with contractor.
- Repair of butterfly valve for seal ring, gear box, etc.; to be done by contractor. All required fasteners, and spares to be provided by MTPS. Hydro-test of butterfly valve to be done at 1.5 times of working pressure.
- Butterfly valve Gearbox to be serviced and reinstalled for each BFV. Required spares will be provided by MTPS.
- All required items for hydro-test like, pressurizing pump, gauges, and fixtures to be arranged by contractor.
- Assistance to be provided by contractor for operating valves during recommissioning.
- **Heavily damaged butterfly valves to be send for repairing to outside agency.**

**List of butterfly valves:**

| Valve description                            | Size (NB) | Actuation type | Qty |
|--|-----------|----------------|-----|
| Vacuum pump cooler I/L and O/L valves        | 150       | Manual         | 04  |
| Debris filter vent valves                    | 200       | Manual         | 04  |
| SG Booster pump suction valve                | 200       | Manual         | 02  |
| SG Booster pump discharge valve              | 200       | Motorized      | 02  |
| SG Booster pump Discharge NRV                | 200       | ---            | 02  |
| SCS back wash valves                         | 200       | Motorized      | 02  |
| Service water to MOC cooler MOV              | 250       | Motorized      | 01  |
| Service water to MOC cooler MIV              | 250       | Manual         |     |
| Debris filter back wash valves               | 300       | Motorized      | 04  |
| PHE Temp. ACW I/L valves                     | 450       | Manual         | 01  |
| CCCW pump discharge valve                    | 450       | Motorized      | 03  |
| CCCW pump discharge NRV                      | 450       | ---            | 03  |
| ACW tap OFF from debris filter               | 500       | Manual         | 04  |
| PHE CCCW I/L and O/L valves                  | 500       | Manual         | 06  |
| PHE ACW I/L and O/L valves                   | 550       | Manual         | 06  |
| Initial filling valves                       | 600       | Manual         | 02  |
| ACW pump discharge valves                    | 600       | Motorized      | 03  |
| ACW pump discharge NRV                       | 600       | ----           | 03  |
| CCCW pump suction valve                      | 650       | Manual         | 03  |
| ACW pump suction valves                      | 700       | Manual         | 03  |
| ACW pump bypass valve                        | 800       | Manual         | 01  |
| SCS I/L and O/L valves                       | 800       | Motorized      | 04  |
| MOC cooler I/L & O/L valve                   | 350       | Motorized      | 04  |
| MOC cooler I/L & O/L valve                   | 350       | Manual         | 7   |
| H2 cooler CV - I/L & O/L valve               | 400       | Manual         | 2   |
| BFP cooler I/L & O/L valves from CCCW header | 250       | Manual         | 4   |
| SG Booster pump bypass valve                 | 100       | Manual         | 1   |
| CCCW header R/C valve                        | 200       | Manual         | 1   |

### **2.3 Cleaning of PHE (03 numbers)**

- Dismantling and Cleaning of 03 numbers of PHE in ACW system.
- Cleaning of each and every plate (both side) with chemical/cleaning agent, with brass/nylon wire brush.
- Required tools, tackles, hoses, brushes, cleaning agents etc; required will be in contractor scope.
- Replacement of damaged gaskets/plates if any.
- Hydro-test of PHEs at sea water as well as CCCW water to be done.
- Vendor to help for valve closing if required.
- Hydrotest dummy to be fabricated by vendor, if required. M.S plate will be given by M/s MTPS.

Data sheet of PHE:

Model: NT-350B-10X

Make: GEA ECOFLEX

No. of Plates: 395 Nos.

Size of PHE plates: 2478 X 1135 MM

### **2.4 ACW SCS Backwash line modification (size 200 NB):**

- Vendor must remove both ACW SCS backwash line.
- Vendor to cut the pipes as per suit to site condition, so that valves can be erected/installed.
- Fabrication/welding of companion flanges on removed pipelines as per instruction of MTPS Engineer.
- As pipes are to be rubber lined, vendor must complete the fabrication within 07 days of permit issue.
- Fabricated pipes will be sent for rubber lining to external agency. Vendor to erect the pipe and bellow after receipt of rubber lined pipe.
- Loading and unloading of pipe spools and valves will be done by contractor for rubber lining/repair by external agency.
- Repair of pipe spools with flanges, patch work, modification in existing piping to be done by contractor. All required consumables like WD40, rustolene, diesel, emery paper, hoses, hose clamps, cotton clothes, etc; will be contractor scope.
- All required general tools and tackles, lifting tools and tackles, fixtures and other materials and welding machine, grinding machine etc.; will be with contractor scope.
- Material for bellow like rubber bellow, companion flanges, sketcher plates, retaining rings, control rods, nut & bolts will be provided by MTPS.

### **2.5 Pumps overhauling (ACW Pump - 3 Nos. + CCCW Pump- 3nos.+ SG booster pump - 2nos.)**

- Dismantling of pump.
- Dismantling of rotary assembly.
- Inspection/measurement of parts.
- Cleaning of parts and equipment.
- Replacement/repair of parts, bearings etc.
- Re-assembly of pumps.

- Re-routing/repair of vent/drain lines/drain plugs of pumps.
- Pump casing removal and shifting for blasting & painting.
- Impeller Balancing (Optional).
- Alignment of pump.
- Blue matching of the pump base as per condition of the base.
- Trial Run.
- Damages to pump or other equipment will be penalized.
- Wooden slippers, lifting belts, chain blocks, D-shackles, dial gauges and other tools (including bearing puller, bearing heater etc.) and materials required will be in scope of vendor.
- Job to be completed within 20 days.
- Job to be supervised by qualified engineer with experience in centrifugal pump maintenance.
- Work men team should consist of millwright fitter and experienced rigger.
- All tools & tackles and measuring devices must be certified by third party agency.
- Alignment shim will be in the scope of vendor and shim material to be SS.
- Individual work report along with measurements to be submitted to MTPS engineer on daily basis.
- Assembly and measurements to be get cross checked by MTPS engineer.
- Hydra will be in the scope of vendor (If required)

Detailed Scope of Work including BOQ for this Contract shall be provided in the Tender / RFQ document to all potential bidders submitting the valid EOI with due tender fees.

### **3 TENDER FEE & TIMELINES:**

- Interested parties meeting the "Bidder Pre-Qualification Requirements" specified under point no. 4 in this document can request tender document and participate in the bidding process by submitting the Expression of Interest (EOI) Letter along with the Tender Fee Payment Details to the contact details mentioned below not later than the deadline specified below. Request for extension of EOI submission date will be not entertained.
- Interested bidders should submit the Expression of Interest (EOI) letter and tender fee payment details to below mentioned email addresses:**
  - Mails shall be addressed to (To): [premkumar@tatapower.com](mailto:premkumar@tatapower.com)
  - Must Mark a copy to (Cc): [anil.agarwal@tatapower.com](mailto:anil.agarwal@tatapower.com)

EOI/ requests without complete information and communication as above within deadline shall be liable to be rejected and will not be considered further.

- Tender Fee, as indicated in the Table 1 above may be paid through **NEFT** as per details for payment of Tender Fee given in Table 2 below:

Table 2

| Details for payment of Tender Fee:                                    |  |
|---|--|
| Bank details for submitting Tender fees through bank transfer / NEFT: | Beneficiary Name: TATA POWER CO LTD<br>Bank Name: STATE BANK OF INDIA<br>A/c no: 30545457373<br>IFS Code: SBIN0009995<br>A/c type: CURRENT ACCOUNT<br>Branch Name & Address: CAG BRANCH, NEVILLE HOUSE, 23 J N HEREDIA MARG, BALLARD ESTATE, MUMBAI-400001 |
| Deadline for tender fee payment and submission of EOI:                | <b>25<sup>th</sup> July 2024, CoB</b>  |

d. **Expression of Interest letter to be submitted along with tender fee payment details should include the following details:**

- A covering letter duly stamped and signed by an authorized signatory clearly indicating the Tender Reference number and your EOI to participate in the tendering process.
- Tender fee payment details / reference number (ensure that tender fee is received by us within specified deadline)
- Bidder to indicate authorized person name, contact number and e-mail id (mandatory) of the person to whom RFQ / tender and all other communications to be addressed for this tender.

e. Detailed Bid Document (also referred as RFQ) shall be issued through Tata Power e-tender portal (Ariba System) only to the parties submitting a valid EOI as per the terms mentioned in this document.

**4 BIDDER PRE-QUALIFICATION REQUIREMENTS:**

Interested parties to note that Bidder shall be required to fulfill the following bidder pre-qualification requirement / criteria to qualify for the subject work. Bidder will be required to submit relevant supporting documents to demonstrate their qualification during the bid submission stage against Tender document / RFQ and bidders not found meeting the pre-qualification requirements given below will be disqualified from the tender.

**4.1 TECHNICAL REQUIREMENT:**

- 4.1.1 Bidder must have executed services for ACW system and condenser system maintenance/ overhaul in atleast 2-3 plants with capacity more than 660 MW Thermal power plants in last 2-3 years. **(Attach Certificates / related supporting documents)**
- 4.1.2 Bidder to provide PO reference of last 3-4 years for ACW system & condenser system overhauling job.
- 4.1.3 Bidder must provide performance certificates from clients where they have done successfully completed ACW system & condenser system overhauling work.



- 4.1.4 Bidder must have competent & sufficient manpower gang & tools tackles for attending the ACW & condenser system overhauling works.
- 4.1.5 Bidder / Tenderer should preferably certify with ISO 9001 / ISO 14001 / ISO 45001 or must give an undertaking for their willingness to obtain the same within 2 months of qualification for the work.

#### **4.2 FINANCIAL REQUIREMENT:**

Bidder / Tenderer should have minimum Average Annual Turn-over of Rs. 1 Crore (Indian Rupees One Crore only) during last 3 financial years i.e., FY 2021-22, FY 2022-23, FY 2023-24. **(Attach Certificate from Chartered Accountant in this regard)**

It may be noted that the above requirements are minimum qualification criteria. However, Tata Power reserves its right to further assess the capabilities of the parties and reserves its rights to further shortlist, accept or reject any party without assigning any reason.

#### **5 BID SECURITY / EMD:**

Interested parties to note that Bidder will be required to furnish a Bid Security along with their Bid, in the format prescribed in Bid Document **in the form of Bank Guarantee or Demand Draft or RTGS**, for an amount as defined in the covering page of this notice document. Bids not accompanied by an acceptable Bid Security shall be rejected by the Owner as being non-responsive and returned to the bidder without being opened.

**Interested parties to note that Bid Security is not required with the EOI and it is required to be submitted with the Bid only during Bid Submission stage** once RFQ is released to the interested parties that have submitted a valid EOI.

#### **6 BIDDING PROCESS:**

Detailed Bid Document (also referred as RFQ) shall be issued through Tata Power e-tender portal (Ariba System) only to the parties that submitted a valid EOI as per terms mentioned in this document.

Bidder to note that commercials for subject tender may be conducted through e-auction. Detailed bidding and auction process shall be detailed in the RFQ / tender document.