



**OWNER:  
MAITHON POWER COMPANY LIMITED (MPL)**

**PROJECT MANAGER:  
MAITHON POWER LIMITED**

**TITLE OF WORK TO BE AWARDED:  
REPAIRING OF ECONOMIZER OLD HANGERS AT REPAIR BED IN MAITHON POWER LIMITED**

**ENQUIRY REFERENCE NO.: MPL/MMD/AD/2023-24/ 2000064923**



## NOTICE INVITING EXPRESSION OF INTEREST (EOI) FOR-

Repairing of Old Economizer Hangers at economizer repairing bed in Maithon Power Limited

<b>Enquiry reference no.:</b> MPL/MMD/AD/2023-24/ 2000064923
<b>Title of Work:</b> Repairing of Old Economizer Hangers at economizer repairing bed in Maithon Power Limited
<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: Mr. Mohd Anish Khan Email: <a href="mailto:anish.khan@tatapower.com">anish.khan@tatapower.com</a> <a href="tel:9234002484">Mobile No. 9234002484</a> Copy of all communications shall be marked to (Cc): Mrs. Choudhury Jayashree Email: <a href="mailto:choudhuryj@tatapower.com">choudhuryj@tatapower.com</a> <a href="tel:9234550658">Mobile No. 9234550658</a>

The Tata Power Company Limited (“Project Manager”) on behalf of M/s Maithon Power Limited (“Owner”) invites Expression of Interest (EOI) from interested parties for the Two-Part e-Tendering Process of following Relevant Work Package:

Table 1

Plant Details	Tender Fee	Bid Security	Estimated annual package value
2X525 MW Maithon Power Limited (MPL), Dhanbad, Jharkhand	INR 1000/- (INR One Thousand Only)  To be submitted along with EOI	INR 5,00,000/- (INR Five Lakhs only). Bid Security to be submitted as a Bank Guarantee or through RTGS or Demand Draft at the BID stage and not with EOI	2.45 Crs

### 1. INTRODUCTION:

Maithon Power Limited (MPL) is a 74:26 joint venture of The Tata Power Company Limited and DVC (Damodar Valley Corporation). MPL owns and operates 2x525 MW capacity, Indian coal based thermal power generation plant based on pulverized coal-based boiler technology. The generating plant is in Maithon near the city of Dhanbad in the state of Jharkhand in India. A brief overview of Owner and Site is given below:

MPL require services of competent parties having experience in Repairing of Old Economizer Hanger at economizer repairing bed.

Site Name	2 X 525 MW Maithon Thermal Power Plant
Owner	Maithon Power Limited
Project Manager	Maithon Power Limited
Site Location	Maithon, Dhanbad district, Jharkhand, India, on the right bank of the river Barakar in the Nirsa-cum-Chirkunda C.D. Block of Dhanbad district, Jharkhand at a road distance of about 7.5 km from Nirsa, North of G.T. Road (N.H.2) and 10 km north of Mugma railway station on the Howrah Mughalsarai Grand Chord line of the Eastern Railway. Latitude: 23 deg 49' - 38" N Longitude: 86 deg 45' - 41" E
Elevation Above Mean Sea Level	156 m to 177 m above Mean Sea Level
Access to Site	Road: About 7.5 km north of G.T. Road Nearest town is Nirsa Rail: Nearest Railway station – Mugma railway station.

## 2. SCOPE OF WORK:

### Scope of work for Repairing of Economizer Old Hangers at Repair bed (99 upper & 99 lower hangers)

Job Description	Quantity	Unit of Measurement
Repair of Old Economizer Top Hangers	99	EA
Repair of Old Economizer Bottom Hangers	99	EA
Ultrasonic thickness	2,00,000	NO
ECO WJ, OD 38.1X4.5/ 5 mm on eco bed (TIG Welding only)	15,000	EA

### **10.10 Tentative Repair Joints are as per below schedule: ECO WJ, Size OD 38.1X4.5 or 5 mm, SA210 Gr C/A EA 15000**

Note: Bidder to quote for quantity as stated above, however payment will be made based upon actual quantity of weld joints executed.

1. Welder test shall be carried out as directed by MPL EIC. Welders to be tested on 3 tests pieces and at simulated actual welding condition within stipulated time. Welder should qualify on all 3 test pieces, else shall be disqualified.
2. Strict quality to be maintained for the Economizer job. Penalty shall be imposed according to Point 15 and 6 of General condition of contract.
3. Radiography of all welded joints is in bidders' scope. In case of failure in radiography checks, joints to be cut and re-welded followed by radiography at the own cost of contractor. Only 100% radiography cleared joints will be accepted. Bidder will provide all necessary manpower and arrangements for NDT and RT, to be included in the rate.
4. All the joints to be done with TIG welding only.



## **10.20. Ultrasonic Thickness/ Tube Thickness Measurement: Activity- Ultrasonic Thickness measurement of Pressure Part Points- Quantity-200000 EA.**

Note: Bidder to quote for quantity as stated above, however payment will be made based upon actual quantity executed.

1. The scope comprises of Thickness survey at Economizer, with the help of ultrasonic thickness gauge.
  2. The scope includes thickness measurement of boiler tubes by Spot cleaning boiler tubes and carry out thickness measurements by ultrasonic thickness measurement method at about 50000 spots as specified by MPL.
  3. Ultrasonic thickness gang shall be arranged by the vendor (Minimum 4 nos.) to carry out the job. However, the bidder may arrange additional number of thickness gauges to complete the job in stipulated time.
  4. Bidder need to deploy experienced and certified NDT expert for the ultrasonic thickness measurement job.
  5. Report of thickness measurement shall be submitted to MPL in hard and soft copy (PDF & excel sheet).
  6. Calibration certificate of ultrasonic thickness gauge to be submitted to MPL for approval.
  7. Bidder must carry curvature probe to get exact thickness on lower diameter curved surface. OD of back pass section tubes is as under. Party must carry adequate number of curved probes for measuring these tubes.
- 10.30 & 10.40 Repair of Old Economizer upper & lower hanger at Repair Bed (99 no upper & 99 no lower hangers): -The total work scope comprises of:
- i. Placing and removal the old 198 hangers (99 no's ECO top AND 99 No's ECO bottom) on repair bed.
  - ii. Cassette Baffles and Shield Removal for inspection.
  - iii. Thorough cleaning of coils for inspection and UT.
  - iv. Thickness measurement by UT (To be paid separately as per Item (10.20)).
  - v. Replacement of Low thickness Tubes and Bends. Size and specification of ECO tubes – OD38.1X4.5 SA210 GrA1,
  - vi. Radiography of all welded joints is in bidders' scope. In case of failure in radiography checks, joints to be cut and re-welded followed by radiography at the own cost of contractor. Only 100% radiography cleared joints will be accepted. Bidder will provide all necessary manpower and arrangements for NDT and RT, to be included in the rate.
  - vii. Bidder shall mobilize at least 2 RT sources of above 15 curies to be engaged in each shift on 24 hours working basis. Enough manpower (Minimum 6 technicians/helpers per source) for parallel activity of RT shoot and film development activity to be engaged by the bidder in each shift.
  - viii. Failed joints repair and RT will be done without out extra cost.
  - ix. For all 198 hangers, top layers (First four top tubes from top of the coil and for 90deg Bend section area both top and bottom area) exposed to flue gases to be shielded. For Hanger number 1, Coil 1&2 (Top and Bottom) and Hanger number 99 Coil number 197&198 (Top and Bottom), complete 270 Degree shielding to be done for entire coil.
  - x. All the repaired hangers to be painted by red oxide. Red Oxide paint, painting tools and manpower will be in bidder scope. Bidder must arrange sufficient no of air spray painting gun for painting purpose. Red oxide paint (Asian Paints make only) Supply will be vendor scope.
  - xi. After repairing and RT all tubes of coil must be clean by emery paper followed by air cleaning. After then red oxide paint to be applied.
  - xii. Re-fixing of tube Shield in top row and cassette baffle for all coils and repair/replacement for any damage of same.
  - xi. Storage of the repaired coils at designated storage location.



### 3. TENDER FEE & TIMELINES:

- a) 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 (as indicated in Table 1) payment details to the contact details mentioned below not later than deadline specified below. Request for extension of EOI submission date will not be entertained and EOIs submitted beyond this deadline may be liable for rejection.

Details for payment of Tender Fee:	
Bank details for submitting Tender fees through bank transfer / NEFT:	Beneficiary Name – Maithon power Limited Bank Name – State bank of India Branch Name – CAG, Mumbai (09995) Address – Neville House, 23 J. N. Heredia Marg, Ballard Estate, Mumbai-400001 Branch Code –09995 Account No – 00000031828734113 Account type – CC IFSC Code – SBIN0009995
Deadline for tender fee payment and submission of EOI:	<b>28<sup>th</sup> Apr- 2023</b>

### 4. BIDDER PRE-QUALIFICATION REQUIREMENTS:

Bidder must fulfill the following bidder pre-qualification requirement / criteria in order 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:

The bidder should have successfully executed and completed as a prime contractor at least one single contract for repairing of old economizer hangers/Boiler Overhauling not less than 250MW of value not less than Rs. 2 Crores (Rupees Two crores only) during any one of the preceding three years (2020-21, 2021-22, 2022-2023) in any State government /Central government /PSU /Limited company.

#### 4.2 FINANCIAL REQUIREMENT:

- The financial net worth of the bidder shall be positive as per the latest audited annual report.
- The bidder shall have during the last three financial years an Average Annual Turn Over of not less than Rs. 5.0 Crores or its equivalent in any other currency related to tender business.
- Single Order of 2 Cr Package Value should have been executed in last three years.
- Certified Copy of service Tax registration and Service Tax return for last Three years. GSTR-1/GSTR-3B must be filled up to previous month.
- 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.



- Certified Copy of Bank statement of the Bidders for last two years.
- Audited Balance Sheet of Bidders for last three years.
- In support of adequacy of working capital (at least 20% of the annualized value of the work) for this contract, the bidder shall have to submit a certificate of solvency / access to lines of credit and availability of other financial resources. The issue date of such certificate shall be dated within three months before the date of tender opening.

#### 4.3 SAFETY REQUIREMENT:

- a) Safety Records---Please provide safety record for last three years.
- b) Valid OHSAS :18001or 45001 Certificate
- c) Valid ISO 14001 ,9001 Certificate.
- d) Safety officer Qualification and Experience Certificate.
- e) List of Machinery/ Tool & Tackle ---Please mention the detail of Machinery/ Tools and Tackles vendor is owning.
- f) Engineer Qualification and his experience certificate. Min 05 Years' experience in Similar nature of job is mandatory.
- g) Scope of Work (Will be provide at the time of RFQ)
- h) Hazard Identification and Risk Assessment/Job Safety Analysis.
- i) Statutory & IR requirements for Service Contracts at MPL – Revised
- j) Service MPL General terms and conditions of Contract
- k) Contractor's Safety Terms and Conditions
- l) Safety Bid Document.
- m) All other applicable safety clause followed/adopted by Jharkhand Government.
- n) All other applicable statutory clause by Jharkhand Government/GOI.

#### 4.4 SUPPORTING DOCUMENTS (to be submitted with Technical Bid):

- o) PO Copy, Completion Certificate from the concerned client in support of successful execution of jobs /reference projects to be submitted.
- p) Experience details of past 03 years should be submitted as per the following table format:

1	2	3	4	5	6
Sl. No.	Client details/ Power plant details	Order No. Date & Year	Contract Tenure	Order value	Details of scope of work

- q) Audited Balance Sheet and Profit & Loss Statement for last 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.

#### 5. BID SECURITY / EMD (to be submitted along with RFQ and not with EOI)

Interested parties to note that Bidder is required to furnish a Bid Security along with their Bid (only during Bid Submission stage), as a Bank Guarantee (in the format prescribed in Bid Document) or as NEFT/RTGS/DD for an amount of INR 5,00,000/- (Indian Rupees Five Lakhs Only). 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.



**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.