



**OWNER:
INDUSTRIAL ENERGY LIMITED (IEL)**

**PROJECT MANAGER:
THE TATA POWER COMPANY LIMITED**

**TITLE OF WORK TO BE AWARDED:
SUPPLY AND SUPERVISION OF ERECTION, TESTING & COMMISSIONING OF
STEAM AND WATER ANALYSIS SYSTEM
FOR**

**PROPOSED POWER HOUSE #7 (PH#7) PROJECT LOCATED INSIDE
TATA STEEL JAMSHEDPUR**

ENQUIRY REFERENCE NO.: CC23PP009

NOTICE INVITING EXPRESSION OF INTEREST (EOI)

Enquiry reference no.: CC23PP009
Title of Work: Supply and supervision of erection, testing & commissioning of Steam and Water Analysis System (SWAS) for PH#7 Project
Type of Bidding: E-tendering (through Ariba online portal) / Two Part (Technical and Price bids under separate envelopes)
EOI Submission Due Date: 30th August 2022, COB
Contact Details: All communication including EOI submission shall be addressed to following officer/s: Ms. Pritha Patra Email: pritha.patra@tatapower.com Copy of all communications shall be marked to (Cc): Ms. Yogita Waman Email: yogita.waman@tatapower.com

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:

Table1 – Tender Summary

Package Details	Tender Fee	Bid Security	Estimated Package Value
Supply and supervision of erection, testing & commissioning of Steam and Water Analysis System (SWAS) for PH#7 Project - CAPTIVE POWER PLANT located inside Tata Steel Jamshedpur, Jharkhand	INR 1000/- (INR One Thousand Only). <i>To be submitted along with EOI.</i>	INR 5,00,000/- (INR Five Lakhs only). <i>Bid Security to be submitted as a Bank Guarantee at the BID stage (and not with EOI)</i>	Rs. 1.2 crores (Rupees One Crores and Twenty Lakhs only)

1. INTRODUCTION:

Tata Power Company limited is hereby inviting Expression of Interest (EOI) from interested and eligible parties for "**Supply and supervision of erection, testing and commissioning of Steam and water analysis system**"

Industrial Energy Limited (IEL) is setting up a green field Captive Power Plant (CPP) of 1x120 MW inside Tata Steel Jamshedpur premises.

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

Smart Center of Procurement Excellence (SCOPE),
Corporate Contracts,
The Tata Power Company Limited,
2nd Floor, Sahar Receiving Station, Near Hotel Leela,
Sahar Airport Road, Andheri East, Mumbai – 400 059.
Maharashtra, India.

2. SCOPE OF WORK:

The Scope of Work under this tender includes design, engineering, procurement, manufacture and assembly, inspection, shop testing at manufacturer's works, painting, packing, loading, forwarding, transport and delivery to site, supply, commissioning, performance and guarantee tests at site inclusive of all Control & instrumentation works of SWAS.

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

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 Payment Details to the contact details mentioned below not later than deadline specified below. Request for Bid Document / EOI will not be entertained beyond this deadline.

b) 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): pritha.patra@tatapower.com
- Must Mark a copy to (Cc): yogita.waman@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.

c) Tender Fee, as indicated in the Table1 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: The Tata Power Company Limited Bank Name: HDFC Bank A/c no: 00600110000763 IFS Code: HDFC0000060 A/c type: CC Branch Name & Address: HDFC Bank, Maneckji Wadia Building, Nanik Motwani Marg, Fort, Mumbai 400023
Deadline for tender fee payment and submission of EOI:	30 August 2022, COB

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 no (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 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 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:

- a) Bidder shall have executed minimum 2 number of similar kind of project in past 5 (five) years in Power plants and at least one project in last 2 (Two) years for similar or bigger capacity plant.
- b) Bidder's offered product must have record of successful trouble-free operation in the last two years.

4.2 FINANCIAL REQUIREMENT:

Bidder shall have an Average Annual Turn Over of not less than INR 5 Crores during the last three financial years.

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/ DD/ 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.

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GE00351-V002-00-IC-SP-002/ D	TECHNICAL SPECIFICATION FOR STEAM & WATER ANALYSIS SYSTEM	Title : General Technical Specification Page : 1 of 12

SECTION-1
GENERAL TECHNICAL SPECIFICATION

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SECTION – 1

GENERAL TECHNICAL SPECIFICATION

1.0.0 INTENT OF SPECIFICATION

1.1.0 This Specification covers the design, engineering, procurement, manufacture and assembly, inspection, shop testing at manufacturer's works, painting, packing, loading, forwarding, transport and delivery to site, supply, commissioning, performance and guarantee tests at site inclusive of all Control & instrumentation works of SWAS in accordance with specific technical requirements, specified technical data, schedules, annexure etc. complete with all accessories in bidder's scope necessary for putting into commercial operation a highly reliable, safe, efficient and environmentally compliant for trouble-free operation of 1X120 MW Thermal Power Plant.

1.2.0 The supplies and services shall be rendered in conformity with proven design principles, taking into account the current technology. The requirements of the contract must be fulfilled in its entirety. Further, the Bidder's performance of work shall include everything required and necessary to complete the intent of this specification properly in accordance with good engineering and construction practices, notwithstanding the fact that every item involved may not be specifically mentioned or the item mentioned may be inadequate for its intended purpose. Details and items, which are not specifically mentioned herein, shall also be adequately and properly performed by the bidder at no extra cost if such details and / or items are reasonably necessary to complete the intent of this specification.

1.3.0 In so far as data on the scope of supplies and services as contained in drawings, but none in specification and vice versa, such data shall be deemed to be contained in both. Contradictions between drawings and specifications, if any, shall be brought to the attention of the Owner / Engineer by the Bidder and the correct requirement shall be obtained. Purchaser's interpretation of various clauses in case of contradictions is final and binding on bidder.

1.4.0 In the event of any conflict between the applicable codes and standards and the requirements of these specifications, the more stringent of the two shall govern, under the interpretation of the owner. In the event, the bidder deviates from any material standard specified herein or offered by them at the bid stage and accepted by the Owner / Engineer, it shall demonstrate the equivalent or superiority of the new material proposed to the one specified or offered and accepted to the satisfaction and approval of the Owner / Engineer. However, the bidder shall bring to notice of the purchaser any such conflicts.

1.5.0 It is not the intent to specify completely herein all the details of the SWAS system. However, the items shall conform in all respects to the highest standards of design, engineering, materials of construction and workmanship.

Should the bidder wish to deviate from this specification in any way, he shall draw specific attention to such deviation by listing the deviations in the 'Schedule of Deviations'.

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1.6.0 It is mandatory for the bidder to furnish along with the bid the deviations if any, whether major or minor, in the '**Schedule of Deviations**' only. In the absence of the deviations listed in the '**Schedule of Deviations**', the offer shall be deemed to be in full conformity with the specification not withstanding anything else stated elsewhere in the offer, data sheet, etc. **The hidden deviations or stated / implied deviations in the offer shall not be acceptable OR binding on the Owner.**

1.7.0 The materials & items shall be capable of operating satisfactorily under the site climatic conditions as specified in project information.

2.0.0 SCOPE OF SUPPLY AND SERVICES

2.1.0 Scope includes design, engineering, manufacture and assembly, shop testing at manufacturer's works, packing and transportation to site, receipt at site, unloading, storage, installation, site testing, commissioning, performance testing and includes items such as maintenance & erection tools, essential spares, consumables & reagents for 2 year operation & Maintenance, startup spares, engineering documentation & training.

All the scope of supply and services as indicated below but without excluding other necessary components and services not mentioned but necessary to complete the work in all respects stipulated, regardless of any omission in this specification.

3.0.0 SCOPE OF SUPPLY

3.1.0 Scope of supply of Steam and Water Analysis System (SWAS) includes design, engineering, manufacture and assembly, shop testing at manufacturer's works, packing and transportation to site.

3.1.1 Steam Water Analysis System (SWAS) for the equipment as detailed in Sec-2 cl: 6.0 - List of measurement of SWAS and Configuration diagram for SWAS.

3.1.2 Dedicated SWAS System, consisting of Dry Panels, Wet Panels & Electrical systems.

3.1.3 Microprocessor based sensors/ Analyzers with LCD Display, Annunciator and its associated cabling.

3.1.4 Coolers shall be provided and to be used in construction with a closed chiller unit to achieve a controlled temperature to Analyser 25 ± 1 °C

3.1.5 All necessary interconnecting cables between wet panel and dry panel shall be supplied by Bidder.

3.1.6 Required chemicals and reagents for each and every type of analyser shall be supplied by bidder for two years from the date of commissioning.

3.1.7 Digital and analog junction box for signals from/to DCS.

3.1.8 Power supply shall be provided at one point in SWAS Room. Bidder shall make arrangements for automatic changeover from one UPS source to another UPS source, in case of failure of current selected source, further distribution and derivation of other voltage ranges as per system requirement. It should be possible to isolate any instrument without interrupting the main power supply by providing MCB's for each instrument / devices. UPS

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supply shall only be used for control purpose and required load details shall be indicated during offer stage.

- 3.1.9 Bidder shall provide a manual isolation valve at the cooling water inlet/outlet line for maintenance purpose. Also Bidder to provide pressure and temperature gauges at ACW Cooling inlet and outlet header. Bidder shall provide flanged connection with mating flange, Gaskets and all the accessories at his terminal point for both supply and return lines near SWAS panel. Owner shall provide Auxiliary Cooling Water with following parameters.

Description	Actual pressure at terminal point kg/cm2(g)	Design pressure kg/cm2(g)	Max / Normal Inlet Temp. Deg.C	Max / Normal Outlet Temp. Deg.C
Auxiliary cooling water	1.5 – 3 bar	5	32-38	48/45

- 3.1.10 However Bidder shall provide the flow rate requirement of ACW water for the complete SWAS system and also Bidder to indicate the pressure drop across SWAS system considering the battery limits during the bidding stage itself and the same shall be limited to 0.5 bar. Bidder shall design the coolers such that ACW outlet temperature from SWAS shall not exceed 45 Deg C. Flanged (80 DN, ANSI 150) inlet & outlet connection at SWAS wet panel shall be provided for cooling water supply and return line. Further piping inside the Panel shall be Bidder scope of supply.
- 3.1.11 Bidder to size the drain & blowdown header as per process conditions including connecting flange and mating flanges. Flanged (50 DN, ANSI 150) connection at a point outside the dry SWAS panel shall be provided for the waste drain (Grab sample drain). Flanged (50 DN, ANSI 150) connection at a point outside the wet SWAS panel shall be provided for sample blow down. Further piping inside the panel shall be Bidder scope of supply

4.0.0 SCOPE OF SERVICES

- 4.1.0 Scope of services of Steam and Water Analysis System (SWAS) includes receipt of systems at site, unloading, storage, installation, site testing, commissioning and performance testing. Providing all labor, material, instruments and equipment for services held at site.
- 4.1.1 Replacement of all defective parts / equipment during the 24 months warranty period starting from the date of handing over of the plant to the owner.
- 4.1.2 All equipment and services, special cables/shielded cables including cabling and termination as required for completing the SWAS system in all respect shall be within the scope of the Bidder.

5.0.0 EXCLUSIONS

- 5.1.0 Cabling between SWAS dry panel and DCS for signal exchange
- 5.2.0 Power supply and grounding pit

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5.3.0 Civil works however minor civil works such as chipping, alignment of cabinets, filling and sealing shall be performed by the bidder.

6.0.0 TERMINAL POINTS

Major terminal points are as indicated below.

6.1.0 Sample Line terminal points: Within supplied SWAS system including isolation valves

6.2.0 Power Supply: -

One set of redundant 230 V AC UPS power supply and 415 V AC normal power supply shall be made available to bidder at one point in SWAS Room. Further distribution and derivation of different voltage levels for SWAS cabinets shall be in bidder's scope.

6.3.0 Cooling Water: -

Terminal point at each SWAS panel battery limits for both ACW Cooling Water supply and return lines.

6.4.0 Drain & Blow down header:

Terminal point at the each SWAS panel battery limits for both blowdown & drain header individually. Bidder to provide flanged connection with mating flange, gaskets and all other accessories at his terminal point near SWAS panel

6.5.0 For signals from/to other systems – At terminal blocks of analog and digital junction box.

7.0.0 BIDDER QUALIFICATION CRITERIA

Bidder shall fulfill following requirement to participate in the bid and shall be clearly brought out in the offer by providing supporting document.

7.1.0 Bidder shall have executed similar kind of at least two no's of project in past five (05) years in Power plants and at least one project in last 2 years for similar or bigger capacity plant.

7.2.0 Bidder's offered product must have record of successful trouble free operation in the last two years.