



**OWNER:**

**THE TATA POWER COMPANY LIMITED**

**PROJECT MANAGER:**

**THE TATA POWER COMPANY LIMITED**

**TITLE OF WORK TO BE AWARDED:**

**ENTERPRISE LEVEL OPERATIONAL DATA HISTORIAN AT VARIOUS LOCATIONS (PAN INDIA) OF TATA  
POWER**

**ENQUIRY REFERENCE NO.:**

**TPCL/UNIFIED PI/CC/FY20/DM001**

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

**ENTERPRISE LEVEL OPERATIONAL DATA HISTORIAN AT VARIOUS LOCATIONS (PAN INDIA) OF TATA POWER**

<b>Enquiry reference no.:</b> TPCL/UNIFIED PI/CC/FY20/DM001
<b>Title of Work:</b> Enterprise level operational data historian at various locations (pan-India) of tata power
<b>Type of Bidding:</b> E-tendering / Two Part
<b>Contact Details:</b> Dakshata Mhamunkar Lead - Corporate Contracts The Tata Power Company Limited, Technopolis Knowledge Park, CENTEC, Mahakali Caves Road, Chakala, Andheri (E), Mumbai 400 093, Maharashtra, India Tel: 022-67173236 (L), Extn 3236 Mobile: 9833724409 Email: <a href="mailto:Dakshata.mhamunkar@tatapower.com">Dakshata.mhamunkar@tatapower.com</a> Website: <a href="https://www.tatapower.com/tender/tenderlist.aspx">https://www.tatapower.com/tender/tenderlist.aspx</a>

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

<b>Description</b>	<b>Bid Security</b>	<b>Tender Fee</b>
<b>Enterprise level operational data historian at various locations (pan India) of tata power</b>	INR 5 Lakhs in form of Bank Guarantee	1000/- (INR Two Thousand Only)

**1. INTRODUCTION:**

The Tata Power Company Limited (TPC) 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.

To enable continuous, real time data access, monitoring, diagnostics and analysis of Thermal generation, Transmission and Distribution fleet of current and future capacities, Tata Power is proposing to set up a Centralized Operational Data Historian (CODH) system.

Tata Power has an established data platform built on OSISoft PI system across the assets at different geography. This networked system, in addition to being in use for various data monitoring, calculations and MIS purposes, also provides data to third party enterprise solutions installed such as ADORE (built on AVEVA Prism- APR system) for early detection of developing abnormalities, Reliability centered maintenance (GE Predix Platform), and also to SAP system to further enhance availability and reliability of plants through enhanced Operation & Maintenance processes. This system is the only source of

operational data available on a common platform. The existing CODH based on OSISoft Pi system was implemented over the last decade in an incremental manner across various operational locations.

Tata Power is now proposing to replace / enhance the existing system with a view to address the issues of obsolescence of hardware, disparate versions of operating systems at different locations, limitations in cybersecurity features and non-optimised use due to distributed nature of existing architecture / license structure, etc. The intent also includes enhancing the utilization of the system by building customized solutions and incorporating latest tools, features and facilities.

In view of this, Tata Power is inviting EOI for the work of "Enterprise level operational data historian at various locations (pan-India) of Tata Power".

The tendering/procurement activities for this Project are going to be driven from Tata Power's following Office:

Centre for Technology Excellence,  
Corporate Contracts,  
The Tata Power Company Limited  
4th Floor, Technopolis Knowledge Park,  
Mahakali Caves Road,  
Andheri (E), MUMBAI – 400 093  
Maharashtra, INDIA

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

The scope of work shall include complete EPC basis Design, Engineering, Supply, Transportation, Delivery at site, Installation, Testing, Commissioning, Training and Handing over of the Centralized Data Historian System as per this specification including software, services and all required hardware other than data servers. The scope also includes, but not limited to, the following:

1. Setting up the Centralized Data Historian system on Purchaser's On premises Private Cloud (Tata Power IDC).
2. Integration with various third-party systems (SAP, ADoRE, GE APM, etc.) as is in the existing system. Any services required for these systems shall be by bidder.
3. Supply and commissioning of communication components such as Converters/Gateways, switches, routers, firewall and other accessories such as cables, connectors etc. required for completing the system.
4. Setting up the communication infrastructure up to the Purchaser's Communication WAN with network security as per Purchaser's security policy.
5. Setting up the communication infrastructure from various sites to centralized Data Historian system at Mumbai (IDC Personal cloud at Purchaser's premises).
6. Web-client for corporate users with capability to handle minimum 100-120 concurrent users.
7. Development of necessary software, Asset framework, analytics, data history, reports, logs, interfaces etc. customized to this project (available history, reports, logs, analytical tools, etc. shall be adopted as is basis).
8. Porting and managing the data history of existing system as available (few sites have around 10-11 years data history). Also, sizing and designing the backup such that no data history is lost for centralized data historian.

9. Conducting Site Acceptance Test (SAT).
10. Training and certification of Purchaser's engineers for Administrative and operational functions.

Detailed Scope of Work/ Technical Specifications, Terms & Conditions are provided in the Bid Documents (also referred as RFQ), which shall be made available to interested parties against submission of Tender Fee as prescribed above.

### 3. TENDER FEE & TIMELINES:

- a) Interested parties meeting the pre-qualification criteria specified under point no. 5 in this document can request for Bid Document and participate in the bidding process by submitting their **Expression of Interest (EOI)** along with the Tender Fee not later than **31<sup>st</sup> Oct 2019**. Request for Bid Document/EOI will not be entertained beyond this deadline to the contact details mentioned above.
- b) Interested parties to submit non-refundable Tender Fee, as indicated in the table above, in the form of **crossed demand draft/banker's cheque/pay order / NEFT** (details given in table below) in the name of "**The Tata Power Company Limited**" payable at par at all branches in Mumbai along with a covering letter duly stamped and signed by an authorized signatory clearly indicating the Tender Reference number, your EOI to participate in the tendering process and indicating name of authorized person, contact number / e-mail id (mandatory) on Bidder's letterhead. It is mandatory to mention Tender Reference no. in the said letter.

Details for payment of Tender Fee:	
The name and address of beneficiary (owner) for preparation of the bank guarantee:	THE TATA POWER COMPANY LIMITED, 34, SANT TUKARAM ROAD, CORPORATE CENTRE, CARNAC BUNDER, MUMBAI 400009
Bank details for submitting Tender fees through bank transfer/ NEFT:	Beneficiary Name: The Tata Power Company Limited. Bank Name: HDFC Bank Branch Name: Fort, Mumbai, Branch code Code:60400240015 Account No.:00600110000763 IFSC Code: HDFC0000060 Address: Manik Motwani Marg, Fort, Mumbai-400023
Deadline for submission of EOI by submitting tender fee	31 <sup>st</sup> Oct 2019

- c) 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. BID SECURITY:**

Interested parties to note that Bidder is required to furnish a Bid Security along with their Bid, in the format prescribed in Bid Document in the form of Bank Guarantee for an amount as defined in the covering note for a value of **INR 5 Lakhs**. 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 to be submitted with the EOI and it will be required to be submitted only with the Bid during RFQ stage.**

#### **5. BIDDER PRE-QUALIFICATION CRITERIA:**

Interested parties to note that Bidder shall be required to fulfill the following pre-qualification criteria and will be required to submit relevant supporting documents to demonstrate their qualification during the bid submission against Bid document/RFQ (not with EOI).

##### **5.1 TECHNICAL REQUIREMENTS:**

The BIDDER shall meet the following requirements and provide documentary evidence thereof in full detail:

A1 BIDDER shall meet all the following qualification requirement:

- 1) Bidder shall be OEM(Original Equipment/product Manufacturer) or exclusive nominated channel partner of OEM of the offered system/software platform and the software/system should have been used as centralized enterprise level operational data infrastructure and a layer for OT(operational Technology)-IT(Information Technology) integration. Enterprise Level centralized data infrastructure should have been used for applications such as- Operational data analytics, MIS(Management Information system), reports & dashboards through Integration with RCM(Reliability centered maintenance), CBM(Condition Based Monitoring), ERP(Enterprise Resource Planning) /SAP ECC(ERP Central Component)/SAP HANA(is an in-memory database and application development platform), BI(Business Intelligent) Tools and capable of supporting future technologies such as stand lone IOT(Internet of things) devices, DER(Distributed Energy resources) integration/Micro Grid, EV(Electric Vehicle) charging, etc. to enable multiple interfaces/integrations on single platform.
- 2) The bidder should have supplied and implemented (by themselves or through channel partner) at least two systems (min. 2 nos. of customers, ) on the similar software platform as is being offered for Thermal & Hydro Generating plants along with Transmission stations & Distribution stations and should have been supplied in the last Five years and should be currently in full and continuous operation for at least last two year either in India or abroad which should be having capabilities like offline remote monitoring, data analytics, MIS and diagnosis on a single data infrastructure platform for Real Time Operational Data access. One of these referred system (customer) should have been successfully implemented for similar application catering to minimum 1,00,000 tags.

- 3) Bidder must be able to demonstrate adequate capability / previous experience of migrating from Owner's existing OSIsoft PI system to the offered system/product to the satisfaction of Owner.

A2 In case Bidder is sourcing any software or solutions from a technology provider / principal ("Principal"), the Principal should provide services to partner to validate the design and participate in the engineering and training. Bidder to submit MAF(Manufacturer's Authorization Form) from principal to provide OEM warranty inclusive of standard support services offered by principal. Also, Principal to confirm offered software is not likely to be declared as end-of-service support within next 5 years from date of submission. The bidder should have executed atleast two projects of similar nature through partnership with the same Principal.

Bidder shall provide all necessary documentation to demonstrate compliance to each of the above requirements.

The documentation shall include, in minimum, the following

- 4) List of at least two (2) specific projects with full details of scope, system description, monitoring philosophy, Hardware & Software Architecture, various analytical applications installed, years since commissioned and current status etc.
- 5) Complete contact details for the above including Customer Name, Email-ID, Phone & FAX numbers along with customer feedback.
- 6) Details demonstrating bidder's domain expertise in both operational Data Sources and IT & Communication systems including, organization structure, technical staff strength, domain experience etc.

A3 The Bidder shall give an undertaking to provide full range of services (including hardware and software design, engineering, installation, commissioning, maintenance, modifications and upgrade support) for the life of the delivered system including Communication interfaces.

## **5.2 FINANCIAL REQUIREMENTS:**

Bidder shall have during the last three financial years an Average Annual Turn Over of not less than Rs. 10 Crores or its equivalent in any other currency.

The Bidder should submit copies of their profit and loss account and audited Balance sheet for the last three preceding financial years along with the Bid Document. In cases, where audited results for the last preceding financial year are not available, certification of financial statements from a practicing Chartered Accountant shall also be considered acceptable.