



OWNER:

THE TATA POWER COMPANY LIMITED

TITLE OF WORK TO BE AWARDED:

Supply and Implementation of Unidirectional Data Gateway (Data Diode) with software and Migration of Existing PI Interface Node” for Jojober Unit 2&3 JOJOBERA POWER PLANT, TATA POWER, JAMSHEDPUR

ENQUIRY REFERENCE NO.: CC26SBJOJO-02

NOTICE INVITING EXPRESSION OF INTEREST (EOI) FOR-

Enquiry reference no.: CC26SBJOJO-01
Title of Work: “Supply and Implementation of Unidirectional Data Gateway (Data Diode) with software and Migration of Existing PI Interface Node” for unit 2&3
Type of Bidding: E-tendering (through Ariba online portal) / Two Part (Technical and Price bids under separate envelopes)
Contact Details: All communication including EOI submission shall be addressed to following officer/s: Mr. Sunil Kumar Batta, Email: sunilbatta@tatapower.com Copy of all communications shall be marked to (Cc): Mr. Prabhakar Rao, Email: urprabhakarrao@tatapower.com

The Tata Power Company 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
<i>Ph #7 - 1X120 MW – Industrial Energy Limited,</i>	INR 2000/- (INR One Thousand Only) <i>To be submitted along with EOI.</i>	INR 1,00,000/- (INR One lakhs only). <i>Bid Security to be submitted as a Bank Guarantee or through RTGS or Demand Draft at the BID stage and not with EOI</i>
* <u>When transferring the tender fee and Bid security via RTGS, it is compulsory to specify the vendor's name.</u>		

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.

Jojobera Power Plant is a division of The Tata Power Company limited & Industrial Energy Limited (JV of Tata Power & Tata Steel owns and operates 1 X67.5 MW & 3x120 MW and 1X120 MW capacity units respectively, Indian coal based thermal power generation plant based on pulverized coal-fired boiler technology. The generating plant is in Jojobera near the city of Jamshedpur in the state of Jharkhand in India.

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

Head Purchase
The Tata Power Company Limited,
Jojobera Power Plant, Jamshedpur 831 016
Jharkhand, India

2. SCOPE OF WORK:

“Supply and Implementation of Unidirectional Data Gateway (Data Diode) with software and Migration of Existing PI Interface Node” for unit 2&3

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 extension of EOI submission date will not be entertained.
- 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): sunilbatta@tatapower.com
 - Must Mark a copy to (Cc): urprabhakarrao@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 Table2 below:

Table 2

Details for payment of Tender Fee:	
Bank details for submitting Tender fees through bank transfer / NEFT:	Beneficiary Name: THE TATA POWER CO LTD Name of the Bank : STATE BANK OF INDIA Branch : BISTUPUR, JAMSHEDPUR Account No : 11008730607 IFSC: SBIN0000096
Deadline for tender fee payment and submission of EOI:	25th June '2025, 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.

- 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:

4.1.1 Bidder should have experience of commissioning data diode with integrated PI system including OPC server, Unified PI server, syslog with Rx/Tx server and firewall. Vendor must have at least minimum two installation in India and running successfully. Bidder should submit successful completion certificate of such integrated project. Without completion certificate bidder will not be accepted technically. Bidder must have at least one engineer who has successfully completed vendor's training program and hold a valid certification. Vendor/OEM should have local support office in India.

4.1.2 Test certificate of Data diode along with all hardware should be comply with Article9, and Article 13 as per CEA guideline 2021.

4.1.3 Bidder will have to provide country of origin of Data diode along with all hardware.

4.1.4 All document, drawing submission for configuration. Bidder should handover original license, OS, application software along with detail system configuration data and backup to Jojobera. Bidder should submit hard copy of as build drawing and engineering document.

4.2 FINANCIAL REQUIREMENT:

1. Bidder / Tenderer should have minimum Average Annual Turn-over of **Rs. 50 Lakhs** (Indian Rupees Fifty Lakhs) during the last three financial years i.e., FY 2021 -22, FY 2022 -23, FY 2024 -24. (Attach Profit & Loss Certificate with UDIN from your Chartered Accountant in this regard)

4.3 SUPPORTING DOCUMENTS (to be submitted with Technical Bid):

- Valid ISO Certificates True Copy
- PO Copy and Completion Certificate from the concerned client in support of successful execution of jobs against each of the three reference projects to be submitted.

Sr No	Name & Address of the Client	Client Station Details	Area of Operation	PO no and date	Contract Duration	Contract value Rs. Crores

- 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

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 through RTGS or Demand Draft**, 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.

Pre-Qualification Requirement (PQR)

Scope of Work: PROCUREMENT OF DATA DIODE (WATERFALL MAKE) OF JOJOBERA POWER PLANT, TATA POWER, JAMSHEDPUR.

4.1 TECHNICAL REQUIREMENT:

1. Bidder should have experience of commissioning data diode with integrated PI system including OPC server, Unified PI server, syslog with Rx/Tx server and firewall. Vendor must have at least minimum two installation in India and running successfully. Bidder should submit successful completion certificate of such integrated project. Without completion certificate bidder will not be accepted technically. Bidder must have at least one engineer who has successfully completed vendor's training program and hold a valid certification. Vendor/OEM should have local support office in India.
2. Test certificate of Data diode along with all hardware should be comply with Article9, and Article 13 as per CEA guideline 2021.
3. Bidder will have to provide country of origin of Data diode along with all hardware.
4. All document, drawing submission for configuration. Bidder should handover original license, OS, application software along with detail system configuration data and backup to Jojobera. Bidder should submit hard copy of as build drawing and engineering document.

4.2 FINANCIAL REQUIREMENT:

1. Statements should demonstrate financial stability and capability.
2. Vendors must have a minimum annual turnover equal to or greater than 3 times the expected contract value in the most recent financial year.
3. Ability to provide performance bonds or bank guarantees if required.

Request for proposal for “Supply and Implementation of Unidirectional Data Gateway (Data Diode) with software and Migration of Existing PI Interface Node”

1. Project Objective

Tata Power Company Limited -Jojobera intends to engage competent vendors for Supply and Implementation of Unidirectional Data Gateway (Data Diode) for the interface between OT & IT ecosystem.

This Data Diode-Unidirectional Security Gateway needs to provide absolute protection to control systems and industrial control networks from attacks emanating from external less-trusted networks. Unidirectional Gateways should contain both hardware and software components, and ensure data flow in one direction only, from the ICS network to the IT network providing 100% protection from remote cyberthreats.

Key Features expected:

- Security - Ultimate security using proven technology
- Compliance - Should help ensure cybersecurity compliance
- Connectivity - ensure seamless connectivity between OT & IT networks.

2. Project Scope of Work

2.1 Scope for implementation of Dat Diode-Unidirectional Security Gateway.

Hardware and Software Installation by Vendor at site should be as per details mentioned in BOM provided by vendor. This BOM is to be prepared after detailed feasibility study and required approval of TPCL. Basic scope includes:

1. Install and configure of Data Diode-Unidirectional Security Gateway at TPCL-Jojobera. **(Make: Waterfall)**
2. TPCL JOJOBERA have Unit 1 to 5 OT OPC servers, EMS system and upcoming FGD system which to be replicate through data diode. **(Total 08 No's OPC)**
3. Supply and install required Hardware and Software as per BOM.
4. Modify existing architecture of PI Interface node as mentioned in Architecture section.
5. 1 year warranty support, Vendor must provide remote support during warranty period and services as per Warranty support terms. Warranty will be start from date of supply. For any upgradation or expansion current product should be under valid warranty support.
6. Vendor must provide required specification for Tx and Rx host servers.
7. After successfully installed and commissioning, Vendor must support during 3rd party audit and do necessary correction ,3rd party vendor auditor will be provided by Client.
8. At Jojobera station, we have 1 nos. of PI interface nodes (HA). After installation, Vendor must assure that the Data Diode data flow to central PI system should be as it is as currently working.
9. Data Diode-USG should support minimum 10,000 PI tags to be replicate from OPC server, there should be provision for Future addition of tags whenever required.
10. Depute on site engineer for configuration.
11. User Training for 2 days.
12. Document submission for configuration.
13. Vendor must have dedicated support ticket tools for regular support.

14. The implementation will include necessary Software and Migration of Existing PI Interface Node.
15. Data Diode-USG installation and Configuration.
16. Rx and Tx host installation and configuration.
17. Shared storage and cluster configuration as required.
18. Set up and configuration for native connector for data replication as per BOM.
19. Tx and Rx host COM/DCOM configuration as required

2.2 PI interface Node installation & Configuration after installing USG.

- As is study of Existing PI system interface node architecture and proposed new architecture with USG.
- Re architecture and configuration Existing 2 nos. PI interface node to 2 nos. PI interface node in high availability after USG installation
- Re install and configure PI OPC instance at PI Interface node as per TPCL security guideline.
- Required configuration in existing firewall and switches while reconfiguration of PI interface node and USG.
- Virtual IP configuration on OT Firewall if required.
- Required DCOM configuration at Tx and Rx on USG and PI Interface node.
- Ensure as is data flow to PI server after USG implementation and re configuration of PI interface node.
- Configuration and demonstration of Remote screen display for PI support engineers
- PI OPC DA, RSV configuration as per BOM. Connectivity to PI server for as is data flow.
- Buffering configuration for PI Data in PI interface.

2.3 Scope of Activity

- a) Project feasibility study
 - Kick-off Meeting & Team Mobilization
 - System feasibility study at site
 - Submission of Feasibility Study and prerequisite document
- b) Project Pre-requisite Verification
 - Hardware configuration
 - Software Configuration
 - Network infrastructure
- c) Project Documentation
 - Functional Design Specification (FDS)
 - Technical Design Specification (TDS)
- d) Project Training
 - User training for 2 days
 - Go-Live
 - Training User Manual & Configuration document

Vendor Certification - Bidder must have at least one engineer who has successfully completed vendor's training program and hold a valid certification. Vendor/OEM should have local support office in India.

Vendor must have at least minimum two installation in India and running successfully in last 5 year.

N.B. - Vendors have to make their own arrangement for their travel and stay arrangement during site visit, TPCL-Jojobera will provide local transport only.

2.4 Scope of Work – TPCL-Jojobera

1. Required all sources OT connectivity up to Central Switch to be provided by TPCL-JOJOBERA as per architecture.
2. Required cabling, Tx and Rx host, Switches, and firewall, Rack to be supply by vendor as per architecture and required specification.
3. OPC server enablement in source system if required.
4. Local conveyance to be provide by TPCL-JOJOBERA.
5. OEM support for source systems if required.
6. Required credential of Source system.

3. BOM

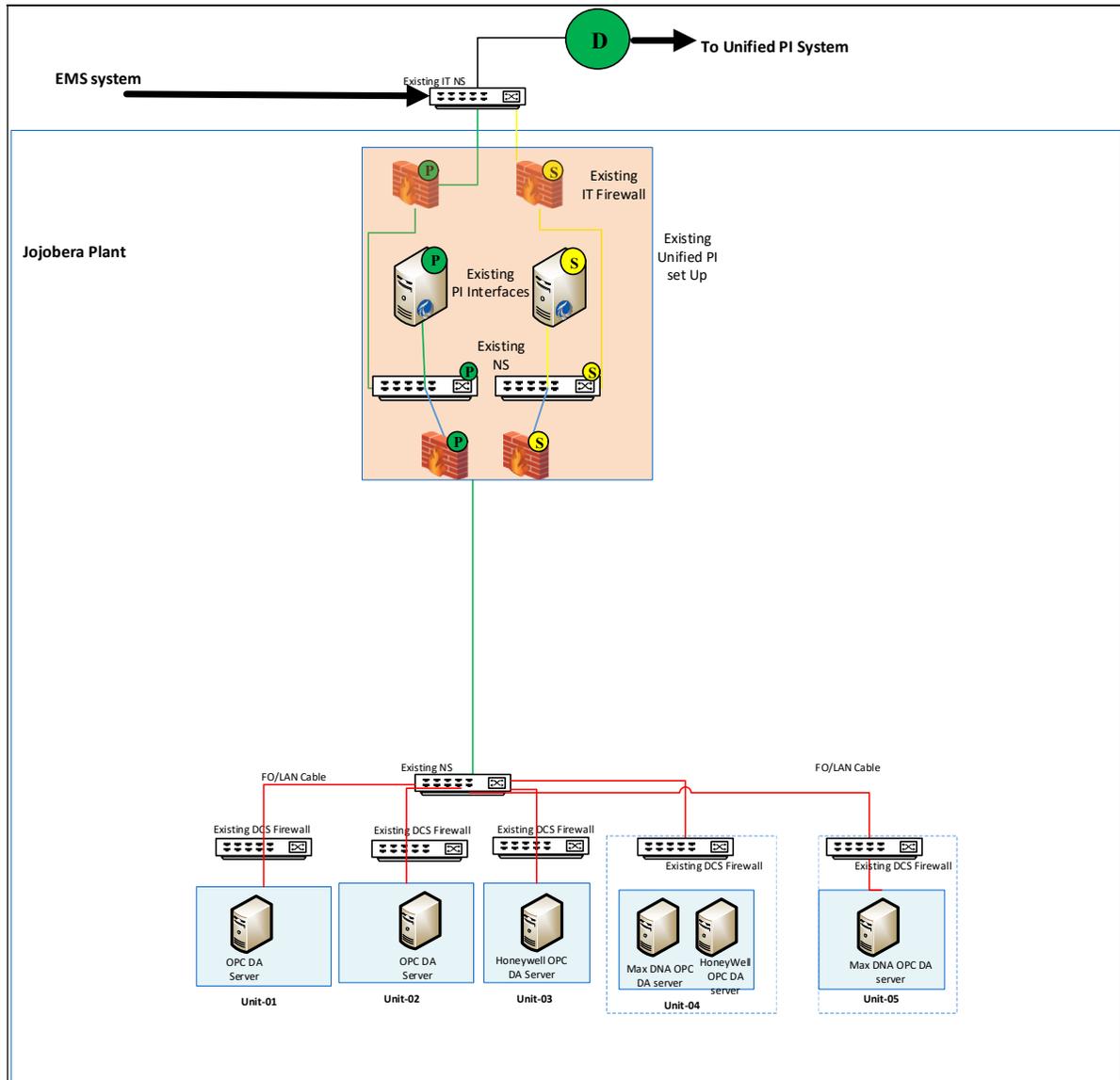
BOM to Supply, Installation and Commissioning by Vendor:

Sr. No.	Items	Specification	Qty	UOM
1	Supply, Installation and Commissioning USG-DD			
1.1	USG- Data Diode –	BOM Includes 1 nos.WF 500 Standard cabinet with Tx and Rx module. 8 nos. Waterfall for OPC DA native connector considering standalone 8 Nos OPC DA servers sources.1 Nos RSV connector. 1 Years of Support warranty from date of device supply Make: Waterfall Security.	1	Set
1.2	USG-DD Services	Including installation and commissioning Services as per scope of work	1	LS

BOM to Supply and Install by TPCL-Jojobera

No.	Items	Specification	Qty	UOM	Remarks
2	Tx-Rx Host Servers for Replication	Processors: Single 16 Core/Dual 8 Core,3.2GHz base clock, Intel Xeon/AMD RAM: Minimum of 32 GB (DDR4 – ECC) Hard Drive/Disk (HD): 250GB available storage, Sata3 SSD or higher Raid Serve grade (TLC) SSD is recommended Network Interfaces: 4x1GB Network Interface Card (NIC) adapters. Operating System: Windows: Windows Server 2019 or later	2	Nos	
3	PI Interface	As per existing Node or upgraded specification if required.	2	Nos	
4	Other Accessories	Switches, Cables, Connectivity, Rack	1	LS	

4. Existing architecture



Safety requirement: -

- i. Party should adhere to Tata Power Contractor Safety Management (CSM) Guideline strictly.
- ii. Noncompliance of safety rules may cause to cancellation of gate pass or spot fine & it will be deducted from the Final Bill amount. If Safety noncompliance found regular / deliberate / chances of higher potential damage, Purchase Order will be closed with short notice & Party will be liable for that.
- iii. Party must commence work on an equipment only after getting clearance from User department along with PTW copies.
- iv. Party must depute trained safety stewards round the clock for ensuring safety at workplace.
- v. Party should submit valid test certificates issued by competent authority of Jharkhand Government before start of job.
- vi. Lifting tools & tackles older than 2 years (from purchasing date) cannot be used in TPCL premises. Hence, necessary purchasing documents of lifting tools and tackles must be submitted.
- vii. All electrical tools to be certified by Tata Power Electrical department before use for work.
- viii. TPSDI L1, L2 skilled & L3 certified employees to be deployed at site.