

TENUGHAT VIDYUT NIGAM LIMITED
(A GOVT. OF JHARKHAND UNDERTAKING)
HINOO, DORANDA, RANCHI-834002

Website: www.tvnl.in

CST NO:229C

TIN NO:200992201429

PAN NO:AACCT1197L

NIT No. - 21/C&I/W/TVNL/RAN /2024-25

Due on - 04.10.2024 at 14:00 Hrs

SRM RFx No. - 1000010074



TENDER DOCUMENT

SUBJECT: Round the clock Operation & Maintenance work of all field instruments and secondary instruments of C&I circle of 2*210 MW Units at TTPS, Lalpania for 1(one) year.



TENUGHAT VIDYUT NIGAM LIMITED

तेनुघाट विद्युत निगम लिमिटेड

(A GOVT. OF JHARKHAND UNDERTAKING)

HINOO, DORANDA, RANCHI-834002, JHARKHAND

Ref No. 692/24-25

Dated:12.09.2024

NOTICE INVITING TENDER
NIT NO- 21/C&I/W/TVNL/RAN /2024-25
SRM RFx No. - 1000010074

For and on behalf of TENUGHAT VIDYUT NIGAM LIMITED (TVNL), Ranchi tenders in two parts (Part-I Technical & Commercial Bid, Part-II Price Bid to be submitted in TVNL Website Only) (Part I consist of A-Requisite cost of Tender Document & Earnest Money of specific value to be submitted to TVNL, contact person well before submission deadline, B-Technical & Commercial) are invited online through SAP-SRM,TVNL website: webdispatcher.tvnl.in/srmprd from experienced, reputed and financially sound firms for Round the clock Operation & Maintenance work of all field instruments and secondary instruments of C&I circle of 2*210 MW Units at TTPS, Lalpania for 1(one) year at Tenughat Thermal Power Station, Lalpania Dist. Bokaro, Jharkhand , the details of which are as follows:-

Description of Work	Round the clock Operation & Maintenance work of all field instruments and secondary instruments of C&I circle of 2*210 MW Units at TTPS, Lalpania for 1(one) year.
Estimated Cost (Rs.) For one Year Period	Rs. 1,24,05,114.00 (Rupees one crore twenty-four lakhs five thousand one hundred fourteen) only plus GST extra as applicable.
Cost of Tender Documents to be deposited only through payment gateway link in TVNL website (Non-Refundable)	Rs. 17,700.00 (Rupees seventeen thousand seven hundred) only including GST.
Amount of EM to be deposited in the form BG or to be deposited in TVNL website through payment gateway only	Rs. 2,48,100.00 (Rupees two lakhs forty-eight thousand one hundred) only.
Downloading of Tender Paper from TVNL website	From 13.09.2024
Last Date & Time for purchase of Bid document	03.10.2024, up to 14:00 Hrs.
Last Date & Time for receipt of Tender /Bid	04.10.2024, up to 14:00 Hrs.
Date & Time of Opening of Part-I of Tender	04.10.2024, at 16:00 Hrs.
Place of submission of bid documents and address for communication	Electrical Superintending Engineer (OS and C&M), Tenughat Vidyut Nigam Limited, Hinoo, Ranchi-834002.

1. The bidder should have the following Technical & Financial Qualifying Requirements (QR)

- The bidder should have successfully executed the works of Operation & maintenance of C&I system of all equipment's / Operation & maintenance of electrical system of all equipment's of thermal power plant having capacity 210 MW or more in any Govt. / Semi Govt. /CPSU/SPSU/ SEB's/ Reputed Private Organization.
 - The average annual financial turnover of bidder during the last 03 (three) financial years, ending 31st March 2024 should be at least 30% of estimated cost.
Bidder should have to submit copy of Audited Annual Report (Financial statement) including Profit & Loss Accounts as well as Balance Sheet clearly evidencing the Annual Turnover figure in support of their meeting above stipulated financial criteria. In case of non-availability of Audited Annual Reports, the Bidder shall furnish a certificate from a Chartered Accountant stating annual turnover for the last three consecutive financial years ending 31st March 2024.
 - The bidder should have experience of having successfully completed similar works during last seven years ending last day of month previous to the one in which tender/NIT is invited. Bidder has to submit copy of work order along with its successful completion certificate. The successful completed similar work shall be either of the following:
 - Three similar completed works each costing not less than the amount equal to 40% of estimated cost.
- OR**
- Two similar completed works each costing not less than the amount equal to 50% of estimated cost.

OR

- iii. One similar completed work costing not less than the amount equal to 80% of estimated cost.
- “**Similar work means**” the work of Operation & maintenance of C&I system of all equipment’s / Operation & maintenance of electrical system of all equipment’s of thermal power plant having capacity 210 MW or more.
- d. The bidder should have financial credibility /capacity of at least 10% of estimated value. Bidder may submit recent Bank Solvency Certificate issued in current period from any Indian Nationalized/Scheduled Commercial Bank of current financial year in support of their financial credibility/capacity.
- e. The bidder should have valid GSTIN no, Permanent Account Number (PAN), Employee Provident Fund Code No. and ESIC registration.
- f. Bidder has to submit a self-certified letter that the bidder is not blacklisted by any Govt. / Semi Govt. /CPSU/SPSU at the time of submission of tender.
2. The tender document is to be downloaded from the TVNL website www.tvnl.in / www.jharkhand.gov.in. Tenders will have to be submitted in TVNL Web Portal only website <http://webdispatcher.tvnl.in/srmprd>. For easy reference “**Vendor Bidding Manual for Open Tender**” can be downloaded/viewed from the TVNL website homepage (https://tvnl.in/pdf/TVNL_Vendor_Manual_for_Open_Tender.pdf).
3. Intended bidder who do not have TVNL Bidder/ Vendor ID, will first communicate with TVNL contact person **Mr. Ganga Ravidas /Mr. Nitish Kumar** during office hours for this aforesaid NIT only, on his Mobile No-**9835352492/ 8334995776** and send their firm details well before the submission deadline like Name, address, email, phone nos. and brief company’s credentials also company’s contact person name, email, Mobile no. may be sent in email ID: ganga.das@tvnl.in/nitish.k@tvnl.in so that login ID & password can be created in SRM-SAP which will be sent to bidders contact person email. Bidder contact person has to register at TVNL web portal: <http://webdispatcher.tvnl.in/srmprd> with the given ID & password.
4. The **cost of tender document** and the Earnest Money shall be deposited well before the submission deadline and has to be **deposited only through payment gateway link in TVNL website. (DD will not be acceptable)**. The copy of the transaction ID or receipt may be submitted to TVNL contact person in person or by mail so that the contact person will allow access to open the RFx details and initiate bidding at TVNL website and attach the details of Part-I.
5. Bidder have to fill as well as attach scanned copies of the related documents to qualify in the part-I (Technical & commercial) on TVNL web portal: <http://webdispatcher.tvnl.in/srmprd> and also the bidder may submit the hardcopy of bid part-I (Technical & commercial) to the ESE(C&M), TVNL, Ranchi office along with the details of paid cost of tender document and paid or BG of Earnest money deposit (EMD).
6. Bidder have to bid for part-II (Price part) on TVNL web portal: <http://webdispatcher.tvnl.in/srmprd> only **Price Part is not to be submitted in Hard copy** (in sealed envelope).
7. Bidder will not get access to bidding in SRM-SAP without providing the cost of tender document. Any type of tempering/alteration with tender document shall not be allowed and offer, if submitted so, will be summarily rejected.
8. Tender without Earnest Money shall not be considered. Cost of tender document and earnest money deposit (EMD) of requisite value as specified above is to be deposited well before submission deadline. EMD may be furnished in the form of Bank Guarantee in required format from any Indian Nationalized Bank/ Schedule Commercial Bank in favour of “TENUGHAT VIDYUT NIGAM LIMITED” payable at Ranchi. The Bank Guarantee should remain valid for 12 months. In case BG is to be submitted against Earnest money deposit (EMD) it is to be submitted to TVNL contact person in a separate envelope so that the contact person will enter the BG details against EMD in the respective RFx well before the submission deadline, failing which offers are liable for rejection.
9. The earnest money will be forfeited on revocation of tender before expiry of validity of the tender or on refusal to enter into the contract after the award is made by TVNL to the bidder.
10. Any corrigendum/Addendum/Extension of bid opening date and cancellation of NIT will be published through our website www.tvnl.in only and not through newspaper. The bidders are requested to visit our website regularly for any addendum/corrigendum/extension till opening of NIT.
11. The due date of bid opening as mentioned in the tender will remain firm. However, in case of unforeseen circumstances or due to administrative reasons the bids are not opened on the due date, the same shall be opened on the next working day at the same time. In case the last date of submission of bids is declared as holiday, the bids received up to the time of closing of bids on the next working day shall be considered for opening.
12. TVNL reserves the right to reject any / all offer increase/decrease or to distribute the quantity among the bidders without assigning any reason thereof.

Sd/-
(Nurul Hoda)
Electrical Superintending Engineer (OS and C&M)

TENUGHAT VIDYUT NIGAM LIMITED
HINOO, DORANDA, RANCHI-834002

BILL OF QUANTITY

PART- I (TECHNICAL& COMMERCIAL)

NIT NO- 21/C&I/W/TVNL/RAN /2024-25
SRM RFx No. - 1000010074

Sub: Round the clock Operation & Maintenance work of all field instruments and secondary instruments of C&I circle of 2*210 MW Units at TTPS, Lalpania for 1(one) year.

S.N.	Particulars	Details to be furnished by the Bidder (Enclose separate sheets if required)	Flag No.	Page No.
1.	Name of the Bidder (Enclose Letter Head of firm)		I	
2.	Address of Bidder with Telephone, Fax, E-mail		II	
3.	Nature of Firm (Proprietorship/Partnership /Pvt. Ltd./Public Sector) (Attach proof)		III	
4.	Name of the Proprietor/ Head of the Firm and its key personnel with organizational chart giving details of qualification and experience etc.		IV	
5.	Whether the firm are registered with NSIC/MSEs/SSI(Jharkhand)/(enclose copy of certificate)		V	
6.	Work Experience of Bidder (Attach copy of work order of similar work and its successful completion certificate during last seven years as per Sl. No. 1.c of QR)	Work Order No..... Dated..... Completion Certificate Dated..... Work Order No..... Dated..... Completion Certificate Dated..... Work Order No..... Dated..... Completion Certificate Dated.....	VI	
7.	Financial Credibility/ Capacity (Attach Bank Solvency Certificate)		VII	
8.	Average annual financial turnover of bidder during the last 03 years (Attach audited Balance Sheet & P/L Account for last three years ending 31 st March, 2024 are essential)	Average annual financial turnover of bidder during the last 03 (three) years Rs..... Annual Turnover FY 2023-24: Rs..... FY 2022-23: Rs..... FY 2021-22: Rs.....	VIII	
9.	Name & Designation of Authorized Signatory (Attach Power of Attorney if applicable)		IX	
10.	Name and Qualification of the site-in-charge		X	
11.	Permanent Account Number (PAN) (Attach proof)		XI	
12.	Goods and Services Tax Registration Number (GSTIN) (Attach proof)		XII	

13.	Labour License No. (Attach copy of registration)		XIII	
14.	Particulars of Earnest Money (Transaction id /BG No. & Date)		XIV	
15.	Particulars of Cost of Tender Document (BOQ) (Transaction ID & Date)		XV	
16.	EPF. Code No. (Attach copy of registration)		XVI	
17.	ESI Registration No. (Attach copy of registration)		XVII	
18.	Payment Terms	Whether you are accepting our payment terms clause at Sl.no.13 of General instructions to bidders? Yes / No	XVIII	
19.	Validity period of the offer (minimum 180 days)		XIX	
20.	Whether you will deposit Security Money. If not reasons thereof with documentary proof of exemption:		XX	
21.	Whether you will furnish the Performance Guarantee		XXI	
22.	Do you fulfill the pre-requisite qualification?		XXII	
23.	Whether you accept all term & conditions of B.O.Q.		XXIII	
24.	Details required for ERP Vendor Coding: - a. Name of firm : b. Address : PIN: c. E-mail ID : d. Phone No. : e. Name of Contact Person: f. TIN No : g. CST No. : h. GSTIN No: i. PAN No : Details required for EMD Refund through RTGS/NEFT: j. Bank Name : k. Branch : l. Branch Code: m. A/c. No. : n. IFS Code : o. MICR Code :		XXIV	
25.	Any extra information		XXV	

(Signature & Seal of Bidder)

TENUGHAT VIDYUT NIGAM LIMITED
HINOO, DORANDA, RANCHI-834002
NIT NO- 21/C&I/W/TVNL/RAN /2024-25
SRM RFx No. - 1000010074

Sub: Round the clock Operation & Maintenance work of all field instruments and secondary instruments of C&I circle of 2*210 MW Units at TTPS, Lalpania for 1(one) year.

GENERAL INSTRUCTIONS TO BIDDERS

1. The tender document is to be downloaded from the TVNL website <https://tvnl.in/> / <https://www.jharkhand.gov.in/> . Tenders will have to be submitted in TVNL Web Portal only with Login URL: <http://webdispatcher.tvnl.in/srmprd>. For easy reference “Vendor Bidding Manual for Open Tender” can be downloaded from the TVNL website homepage. Link: (https://tvnl.in/pdf/TVNL_Vendor_Manual_for_Open_Tender.pdf).
2. First time bidder will first communicate with TVNL contact person during office hours with their firm details well before the submission deadline like Name, address, email, phone nos. and company’s contact person name, email, Mobile no. may be sent in email ID: ganga.das@tvnl.in/nitish.k@tvnl.in , so that login ID & password can be created in SRM-SAP which will be sent to bidders contact person email. Bidder contact person has to register at TVNL web portal: <http://webdispatcher.tvnl.in/srmprd> with the given ID & password.
3. The cost of tender document shall have to be deposited through payment gateway link provided in TVNL website which is Non-Refundable. Detail regarding the Transaction has to submitted to TVNL contact person, in person enclosed with a letter or by email giving detail of Rfx no. tender name in which the bidder has register and wish to participate. The contact person will allow access to open the RFX details and initiate bidding at TVNL website and attach the details of Part-I. **Bidder will not get access to bidding in SRM-SAP without providing the detail of cost of tender document and Earnest money deposit (EMD) deposited.**

Bidder has to follow below steps for Online Tender Fee or EMD Payment.

After registering against the RFX you have to follow the below steps:

- i. Go to TVNL website <http://tvnl.in>.
- ii. Click on the navigation tab “Tender Payment” link (at the Top Right-hand side of the TVNL web home page).
- iii. It will redirect you to the online payment page.
- iv. Enter your User Id to proceed further.
- v. Enter the RFX no. for which you want to participate.
- vi. Click on the “Go” button.
- vii. Click on the Pay button to proceed for payment of “Tender Fee” or “EMD”.
- viii. It will redirect you to the payment gateway for payment.
- ix. Enter your card details or go for online banking for payment.

After payment is completed, please inform the concerned department with the receipt generated via email and request to provide access to the respective RFX number with your user Id.

4. The bidder may submit in sealed envelope hardcopy of all the enclosures uploaded of bid part-I (Technical & commercial) to ESE(C&M), TVNL, Ranchi office along with the copy of Txn. Slip of cost of tender document and Txn. Slip of Earnest money deposit (EMD). EMD if submitted in the form of BG, then it should be submitted personally or sent by Registered Post / Speed Post. The NIT no., bid due date, details of cost of Tender and earnest money deposit (EMD) should be super scribed on the envelope if details are sent by Post.

Bidder have to bid for part-II (Price part) on TVNL web portal: <http://webdispatcher.tvnl.in/srmprd> only. Price Part is not to be submitted in Hard copy.

5. Offers shall be accompanied with details of earnest money deposit (EMD) of requisite value as specified failing which offers are liable for rejection.

EMD may be furnished in any of the following forms: -

- a. Through payment gateway link provided in TVNL website. (DD will not be acceptable).
- b. Bank Guarantee from a Nationalized bank/Schedule commercial bank irrevocable & operative till 30 days after the validity of the offer or extended validity of the offer.
- c. The earnest money will be forfeited on revocation of tender before expiry of validity of the tender or on refusal to enter into the contract after the award is made by TVNL to the tenderer.

Tenders without Earnest Money shall not be considered other than NSIC/SSI registered and Jharkhand registered MSEs firms. Jharkhand registered Non MSE firms will get 50% concession in

EMD. A copy of such registration/ license/certificate as per Jharkhand MSME act has to be furnished for claiming exemption/concession in EMD.

6. If any bidder quotes the rate below than the estimated price and is considered for placement of the order, the bidder will be asked to justify the rate quoted and will have to give Performance Guarantee Bond (in addition to the Security Deposit) in the form of bank draft/bank guarantee. The amount of Performance Guarantee Bond will be equivalent to the difference between his quoted price and estimated cost. Earnest money deposit of the bidder who refuses to give Performance Guarantee Bond will be forfeited and they will not be considered in re-tendering if order/contract is not finalized from the present tender. In any case of non-execution of the contract, the above submitted BG will also be forfeited.
7. **Validity of Offer:** The bid submitted by the bidders should remain valid for a minimum period of 180 days from the date of opening of Part-I unless otherwise specified.
8. **Late Receipt of the Tender:** Special attention of the bidder is invited about the receipt of the online bids in time. Bids received after the stipulated date and time due to any reason, whatsoever, shall not be considered.
9. **Inspection of Site:** Before quoting the rate, bidders are advised to visit the work site and get satisfied with scope of work for which rates are to be quoted. Engineer -in -charge may be consulted for any clarification regarding scope of work and terms of tender. Bidder should go through the terms and conditions and technical specification of work carefully and sign in all pages of the tender document.
10. **Instruction to Bidder:**
 - i. Bidders are advised to submit their bids strictly based on the scope of work, terms and conditions contained in the bid document and subsequent revisions/amendments, if any. The bid should be submitted along with covering letter.
 - ii. The bid shall be prepared and submitted by typing or printing in English on white paper in consecutively numbered pages duly signed by the authorized signatory with company seal affixed on each page. Any part of the bid, which is not specifically signed by the authorized signatory and not affixed with company seal, may not be considered for the purpose of evaluation.
 - iii. Copy of bid document, amendments/revisions to bid document if any, shall be signed and submitted along with the bid.
 - iv. Complete bid document including all enclosures should be scanned and submitted. All pages should be numbered and must be signed by the authorized signatory with seal of the company.
 - v. A copy of "Part-I (Techno-commercial Bid)" may be submitted in hard copy by speed / registered post or by hand with, Name and address of the bidding firm, NIT no. super-scribed and should be addressed to ESE (C&M), Tenughat Vidyut Nigam Limited, Hinoo, Ranchi-834002. The bid submission deadline is only valid for submitting your price bid and all the documents in TVNL SRM online web portal.
 - vi. The Part-II (Price Bid) has to be bid in TVNL website: <http://webdispatcher.tvnl.in/srmprd> only.
 - vii. The envelope containing Part-I (Techno-commercial Bid) should be super scribed with NIT No., Name and address of the bidding firm, and should be addressed to ESE (C&M), Tenughat Vidyut Nigam Limited, Hinoo, Ranchi-834002. Complete tender or tenders not submitted as per requirement as indicated in the NIT are likely to be rejected.
 - viii. Bidders shall submit their offer strictly as per terms and conditions of the tender document without any deviation. If at any time any of the documents/information submitted by the bidder is found to be incorrect, false or untruthful, the bid and/or the resultant order may be summarily rejected/ cancelled at the risk of the bidder.
11. Failure to furnish all information and documentary evidence as stipulated in the bid document or submission of an offer that is not substantially responsive to the bid in all respects shall be summarily rejected.
12. **Security Deposit:** The successful bidder shall have to deposit total security deposit @ 10% of order value as performance guarantee in which initial security money @ 5% of the order value (including earnest money deposited along with tender) before executing the agreement, balance 5% of security money will be deducted from R/A bills. The security money will be released after successful completion of work and closure of contract. Initial security money will be accepted as Bank Draft/ Bank Guarantee in the prescribed format.
13. **Payment Terms:** Payment of Contractor will be made through monthly running bills which will be verified by Engineer - in - Charge after successful completion of the work and payment of wages to

the employee by the Contactor. Deposit of ESI premium and EPF on account of employee is must against this contract. The monthly R. A. bill in triplicate will be submitted by the Contractor to the Engineer -in #Charge for its verification and the department will make payment to the contractor subject to availability of the fund. No interest will be paid in case of delay in any payment. The contractor shall produce documentary evidence of previous month in support of deposit of EPF, ESI & GST (Bonus, overtime, Leave, Insurance, Medical, Safety etc if applicable or paid) before release of payment. Contractor must ensure the payment of wages to workmen deployed in preceding month latest by 5th day of every month irrespective of clearance of bill submitted at least for two consecutive months failing which penalty @ 0.5% per day (maximum up to 5%) of monthly contract value will be deducted from running bills of the contractor. All statutory taxes as applicable shall be deducted from each running bill of contractor.

14. Paying Authority: The Accounts Officer, TTPS, Lalpania will be the Paying Authority.

15. Engineer-in-Charge: Concerned Electrical Executive Engineer will be the Engineer-in-Charge for this work. The works are to be executed as per direction of Engineer-in-Charge. Anything not mentioned here in shall be decided by the in charge of the work and shall be binding on the contractor.

16. Idle Charges: No charges for idle men, machine, plant and equipment will be allowed to agency for some reason or the other beyond control of the department.

17. Safety Measures: TVNL has a zero-tolerance policy on adherence to Safety norms. The Contractor shall have to observe all the safety measures. The contractor has to make all the employees aware of risk involved in the work. The contractor shall provide all safety appliances, tools and equipments to the workmen and supervisor at contractors cost and ensure that those items are used by all staff while working and on whole duty period. Name of such important personal protective equipments (PPE) are given below: -

- i. Asbestos hand gloves, Apron Asbestos cloths etc.
- ii. Rubber & Leather hand gloves,
- iii. Safety shoes for all types of works,
- iv. Safety belts and hooks,
- v. Helmets, Ear muffs, Safety goggles, Nose muffs etc.
- vi. Any other items related to safety rules may be assumed in contractor's scope.

If workers employed by the contractor found not using PPE a recovery will be made at the rate of Rs. 50/- per worker per day per occasion. Any compensation payable to your employee in the event of accident or casualty has to be borne by you and Nigam will not be responsible on this account in any case. In case of any damage due to negligence mishandling and mal operation by the staff of contractor, the damage would be made good by the contractor at his/own own cost. In case of non-compliance, proportionate deduction will be made from the bills of the contractor. Any compensation payable to the Contractor's employee in the event of accident or causality has to borne by the Contractor himself and TVNL will not be responsible on these accounts in any way.

18. GENERAL TERMS & CONDITIONS

a) Scope of the work: Scope of the work is detailed in BOQ to execute the work. However, contractor has to execute all the work as per direction of Engineer-in-Charge for proper working of equipments.

b) Labour Laws: The bidder has to follow the guidelines laid under the labour law, workmen compensation, and EPF rules in respect of minimum wages, EPF payment, Overtime, Holiday, Bonus Payment, ESI registration of all its employees and monthly/Yearly premium payment as per the guidelines of State Labour Deptt. and other service conditions. In the event of any accident / casualty to the employees of contractor, the compensation payable to the employees is to be borne by the contractor and TVNL will not be responsible in any way.

c) Minimum Wage Guarantee: The contractor shall strictly ensure that the minimum wages as stipulated by GoJ from time to time is paid to their workmen. Any increase in minimum wages like VDA during the period of contract, will have to be paid to their workmen without any claim on TTPS/TVNL. If the contractor fails to comply with guarantee of minimum wages then the agreement is liable to be terminated and security money may be forfeited.

d) Taxes: All statutory taxes as applicable shall be deducted from bill of contractor.

e) Violation of Terms & Conditions of Tender: All terms and conditions of tender shall form a part of the contract. If contractor fails to execute the work up to entire satisfaction of Engineer - in -Charge as per terms & conditions of tender, then the contract agreement can be terminated on one-month prior notice and security money shall be forfeited.

- f) **Subletting:** The successful bidder will have to execute the work directly. No subletting will be allowed.
- g) **Man Power:** Total 33 workmen will be provided by you.
- Highly skilled – 25 nos.
 - Skilled – 01 no.
 - Semi-skilled – 02 nos.
 - Un-skilled – 05 nos.

A list of manpower arranged by the contractor should be submitted to Engineer -in -Charge of the work before deployment and same should be deployed with due permission of Engineer -in -Charge. No employee should be aged above 60 Years. If the performance of the deployed person is not found up to the mark at any time, the contractor will have to replace them with experience and suitable person. During the period of absence of contractors personnel TVNL will have right to deduct penalty from contractor's bill.

- h) **Tools & Tackles:** The contractor should have to arrange minimum of minor and special tools & tackles as per scope of work whereas heavy tools like hydra crane will be arranged by TTPS if available as per request of contractor. Contractor will arrange standard make tools after getting approval from EIC. Contractor will arrange welding M/C, gas cutting set etc to carry out any mechanical work in maintenance of field instruments as and when required. The entry of tools and tackles inside the power house should be verified by the CISF and should match with the requirement. Pro-rata deduction will be made if any mismatch is found. Contractor will get calibrated atleast 06(Six) multimeters in use by ETRL, Kolkata once in a year.
- i) **Consumables:** The contractor has to provide all consumables like Rustolene, CRC, Petrol, grease, jute, cloths, soap, plastic pouch/sheet, Putty for panel sealing, gasket for junction boxes. Cable lugs, cable gland, pipe Fittings, copper tube, fasteners & gasket will be supplied by TVNL. Contractor will maintain minimum amount of consumables at site to meet any emergency work. Minimum stock will be decided by Engineer in charge. The entry of consumables inside the power house should be verified by the CISF and should match with the requirement. Pro-rata deduction will be made if any mismatch is found.
- j) **Site Cleaning:** The Contractor must keep clean the working area after completion of the job. Waste materials and garbage shall be disposed off by the contractor at suitable place as per the instruction of the Engineer-in-Charge. Old unserviceable spare parts if so, has to be returned by the contractor to the Central Store/Site Store of TTPS as per the instruction of the Engineer-in-Charge.
- k) **Facilities to be provided by TVNL:**
- Special T&P, jigs and fixtures, which are supplied by the OEM or procured by the TVNL shall be supplied as required.
 - Closed space nearest to work spot for storing of our T&P and a room for office.
 - Service water, Electricity and compressed Air nearest to work spot.
 - E.O.T crane as and when required.
 - Guest house facility shall be provided to the visiting engineers/officers of the Contractor on chargeable basis if available.
 - Unfurnished accommodation may be provided to the employees of the Contractor, if available during the period of execution of work in TTPS Township on rental basis as per departmental rule.
 - Medical facility as available at project site shall also be extended to the employee of the contractor. No payment will be made for any medicine purchased from outside or any treatment or test done outside the TTPS Hospital.
- l) **Working Administration:** In general working hours of the TTPS employee will be the working hours of employee of Contractor. However, in case of emergency or as per requirement of the job, contractor's employees will be required to work beyond working hours and also on rest days and holidays on the direction of Engineer -in -Charge. Employees deployed by the contractor will be under the operational control of Engineer -in -charge. In case of any employee working in shift/general duty falling sick or proceeding on leave the facts shall be brought to the knowledge of Engineer -in -Charge and deficit will be made by the contractor either by the existing staff by performing overtime duty or getting other manpower without adding any additional cost to the Project. It shall be binding on contractor that it does not directly or through its personnel divulge the secrecy of the establishment of TTPS. Any person deployed by contractor will not be a member of any trade union operating in the TTPS Projects establishment or outside. They will not take part in any strike or sympathized with any such movement. Employee age shall be

mentioned in the identity card. The agency shall ensure that no unauthorized persons create any nuisance, disturbance, theft or pilferage of TVNL property or unauthorized transportation. The agency shall apprehend culprit and bring it to the notice of authorities of TVNL. If directed, the agency shall hand over them to local police authorities and follow – up the cases with police authorities on behalf of the TVNL Management and keep a close liaison with local police authorities for follow up action.

- m) Penalty:** The work allocated by Engineer - in -charge is to be completed within the time period and as per schedule. In case of any breakdown, fault or emergency maintenance, the contractor has to attend the same without any delay. In case of failing or deliberated neglect, the work will be carried out through outside agency at the cost & risk of the contractor and this may be liable for termination of their contract. Penalty will be deducted for the work not executed or not satisfactory work at the rate of quoted price plus 25% for that portion proportionately. If any labour found smoking, drinking, chewing betel nut, pan parag etc within power plant. Rs. 200/- per worker per occasion will be deducted from contractor.
- n) Departmental Facilities:** In case of major repair of equipments and testing of special equipments contractor should have to provide services of an expert from manufacturer and special tools & tackles. The contractor will also provide all other technical staffs and T&P's consumables etc free of cost. However, all spares parts shall be provided by TVNL on free of cost.
- o) Transportation:** Successful bidder will be required to arrange his own conveyance for their employee for attending their duties. However, in case of emergency call during night, transport available may be provided by TTPS.
- p) Mobilization Time:** The successful bidder will be given maximum 10 days' time from the date of Information for mobilization of resources, manpower and starting the work. The contractor failing to enter into agreement within 30 days of receipt of Work order and if fails to start the work within 10 days from the date of written information, will lose the work order and earnest money/security money and work will be allotted to L2, L3.....bidder if they agree.

19. Agreement: The firm or his legally authorized representative having Power of Attorney will have to execute an agreement with the ordering authority within 30 days of issue of order in the event of placement of order on them. The agreement will have to be prepared on a non-judicial stamp paper of Rs.100/- on Nigam's format. Bank Guarantee against Security Deposit, Performance Guarantee etc. as per order will have to be furnished well before execution of agreement. The contractor is required to produce all original paper and documents for verification before agreement failing which order will be cancelled.

20. Jurisdiction of Court: Any dispute between the Contractor and TVNL shall be settled in the civil court, at Ranchi, Jharkhand only.

21. Competent Authority: Managing Director TVNL reserves the right to extend the due date and to reject any/ all the tenders or to increase / reduce/ distribute the quantity of tender without assigning any reason thereof and not bound to accept the lowest tender or to assign any reason for the rejection of the lowest tender. During the execution of work in case of any dispute between the Engineer-in -Charge and contractor, the decision of GM- cum-CE, Tenughat TPS will be final and binding.

22. Variation of quantities of work: The contract price is based on the units' rates and the quantities of items stipulated in the contract. The contract price may undergo corresponding change, if the work orders for change in quantities of items during execution of work. However, the units' rates indicated in price schedules shall remain firm and shall not be subject to any escalation whatsoever.

23. Extension of Contract: If found satisfactory the contract may be extended for further period agreed mutually on same rate, terms and conditions however the only applicable VDA declared by the GOJ after the completion of the contract period with overhead at the rate of 35.94% (EPF, Bonus, ESI & contractor's profit) will be enhanced in the contract monthly value on production of documentary evidence and on due initiation of PR by E-I-C and after approval of competent authority. However, the agency has to accept the rate of extension period or rate decided by new tender whichever is lower.

24. Liquidated Damages for Delay in Completion: In case of any delay in the execution of the work beyond the stipulated date of completion/ Completion schedule including any extension permitted in writing, TVNL reserves right to recover from the agency a sum equivalent to 0.5% of the value of the delay work for each week of delay and part thereof subject to a maximum of 5% of the total value of the work.

(Signature & Seal of Bidder)

TENUGHAT VIDYUT NIGAM LIMITED
HINOO, DORANDA, RANCHI-834002
NIT NO- 21/C&I/W/TVNL/RAN /2024-25
SRM RFx No. - 1000010074

Sub: Round the clock Operation & Maintenance work of all field instruments and secondary instruments of C&I circle of 2*210 MW Units at TTPS, Lalpania for 1(one) year.

SCOPE OF WORK

The scope of work as follow will be as general guidance for maintenance activities for the agency. However, all such jobs required to maintain will be carried out as per the instruction of engineer-in-charge without claiming any extra charge by the agency.

Round the clock Running, Preventive, General & Breakdown maintenance of the following types of field instruments related to following areas.

- (I) Station C&I, BOP, HMI, DDC.
- (II) ACTUATOR: Pneumatic Actuators & local controllers, Hydraulic actuators of HP Bypass system, Oil supply Units, Generator duct pressurization system,
- (III) EAST: Electro hydraulic controller, Turbine stress evaluator, Automatic Turbine tester & run up system, turbine protections, Turbovisory, LP Bypass and seal steam control, stator water flow and conductivity, seal oil system, Hydrogen purity and dew point, Generator signaling panels,
- (IV) FSSS: Secondary Air Damper Control, Milling system & its associated Gravimetric Feeder, Oil firing system, mill fire protection, Public Addressing system with point-to-point communication system,
- (V) Common Facility: SWAS, CW pump house, Oil Facility, Oil unloading system, compressor House, drier system, Water Treatment plant, DM plant, ACW pump House, Fire Fighting system, Gas analyzers, opacity monitors, EPABX system and other auxiliaries, local area of both units.
- (VI) Coal Handling Plant (CHP), Ash Handling Plant (AHP), Environment Monitoring System.
- (VII) The contractor must employ qualified, technically skilled personnel across all C&I areas as supervisors to take direct instruction from EIC/AExEs for preventive maintenance, breakdown maintenance, and other situations such as unit trips or strikes, ensuring compliance with all instructions to protect the units from technical issues, with penalties deducted from the contractor's profit in case of non-compliance.

List of Field instruments and Scope of the work:

A) Field instruments:

- RTDs & Thermocouples.
- Contact Temp Gauge. Weekly Checking of the gauges for tripping CKT of HT Equipment.
- Monitoring & record keeping of Bearing and winding Temp. Of all HT motors.
- Pressure Gauges /Temp Gauges /DP Gauges /Flow Gauges/indicators.
- Pressure/Temp/DP/level/flow/Position/Feedback transmitters
- Displacer/radar type level transmitters
- Pressure/Temp/DP/Limit/Flow switches
- Checking and adjustment of all types of limit switches.
- Solenoid valves of gates, Dampers at Compressor house, AHP,CHP etc.
- Electronic Drum level indicator
- Centrifuge system in MOT.
- Maintenance of Impulse pipes after root valves. Routine purging of all impulse lines.
- Replacement of damaged cables with fresh cables, instrument cable disconnection/connection of Electrical actuators.
- Replacement of damaged cables from field instruments to local JB and then to control room.
- Maintenance and calibration of Pneumatic actuators of gates, valves, drives ,dampers, pneumatic local controllers, Pneumatic actuators of APRDS system.
- Testing and calibration of I/Ps (Current to Pr. Converters) PFTs (Position Feedback Tr.)FPRs (Filter cum Pr.Regulators) Air lock relays and accelerating relays pertaining to pneumatic actuators.
- Checking and calibration of Pneumatic/smart positioner, connection /disconnection of actuators instruments as & when required.
- Checking and calibration of Pneumatic positioner of M/S IL palghat,M/S Keltron,M/S MIL controls.
- Maintenance of servo-valves, blocking units, Fast opening units, line filters, oil lines and nitrogen cylinder pressurization system. Maintenance of oil supply units
- Maintenance of Generator duct pressurization system.
- Maintenance of Turbine turbovisory System Viz vibration, speed and expansion pick ups.

- Stator water conductivity meters, H2 purity analyser, Generator signaling panel, cathrometer, H2 seal oil DP transmitter, cation column.
- All trip valves & corner valves, HEA ignitor, Exciter boxes of oil firing system.
- Actuators, positioner and air system, weekly calibration of SADC system.
- Flame scanner system, Cleaning of Flame scanner, maintenance of cooling air system.
- Assistance in calibration of RC feeder & replacement of Tacho meter and load cell.
- Maintenance of Mill DP and noise Level system.
- Maintenance/ replacement of coal feeder motors.
- Maintenance of PA system inside the Power plant campus right from switchyard, GCR, Main Power House, ESP to CHP at different locations.
- O2, Co, CO2 Sox, Nox, SPM and effluent analyzers, silica analyzer, hydrazine analyzer, turbidimeter, AQMS and Opacity monitors
- Dissolved O2 Analyzer
- SWAS, Routine checkup of SWAS online analyzer.
- EPABX system (power house, Adm. Bld., Colony area)
- Checking/Testing/repairing of telephone sets
- Day to day maintenance of environment parameter monitoring system installed at Hospital premises, Raw water plant area & day oil tank area, effluent quality monitoring system.
- Programmable logic controller and its associated mimic system for
 - (a) Main unit installed at CHP control room.
 - (b) Remote unit (R101) installed at central MCC room.
 - (c) Remote unit (R102) installed at Track hopper MCC room.
 - (d) Remote unit (R103) installed at Bunker level MCC room.
- Power packs for
 - (a) Vibro feeders
 - (b) Paddle Feeders
 - (c) Traverse drive of Paddle Feeders.
- Coal Bunker Level indicators of both the units.
- Digital Belt weighing system installed in conveyors.
- Safety Switches (Pull cord, Belt Sway, Zero speed Switches) for conveyors at CHP.
- Limit Switches of Flap Gates at CHP & Travelling Tripper at Bunker Floor.
- Maintenance of Belt watch System.
- PLC system of AHP, UPS/battery of AHP
- Vacuum breaker system, segregating valve actuators.
- Calibration, maintenance of ash level indicators.
- Testing and calibration of I/Ps (Current to Pr. Converters), FPRs (Filter cum Pr. Regulators), vacuum transmitters,
- Servicing and removal/ Fixing Level switches, solenoid valves, pressure switches, temperature switches air filter regulator, Pneumatic actuator, Damper, pressure gauge, Temp gauge, I/p, air lock realy, level switch, Limit switch, Proximity Switch etc.
- RTDs, Contact Temp Gauge. Weekly Checking of the gauges for tripping CKT of HT Equipment.
- Monitoring & record keeping of Bearing and winding Temp. Of all HT motors.
- Welding, cutting and other mechanical work involved in maintenance of all field equipments as and when required.
- Weekly cleaning of Junction boxes, securing its Lid, replacement of damaged JB
- Assistance in day to day maintenance of UPS/UPS batteries
- Electro hydraulic controller, Turbine stress evaluator, Automatic Turbine tester & run up system, turbine protections, Turbovisory, LP Bypass and seal steam control, stator water flow and conductivity, seal oil system, Hydrogen purity and dew point, Generator signaling panels.
- Junction box, reference box and heaters
- Panel termination tightness checking at all locations.
- Testing of annunciation lamps.
- Overhauling of controllers, solenoid valves, solenoid operated control valves & instruments.
- Replacement of defective air hose connection for operation of SADC cooling system of scanners and ignitor rods.
- Purging of all impulse lines, poking of air foil and various transmitters.
- Mercury-in-steel thermometers (Capillary & direct mounting)
- Conductivity and Ph meters.
- Glass tube level indicators and nivometers.
- Cleaning and tightening of field instruments as well as scanners, recorder and other panel mounting

instruments.

- Laying of GI pipe, Transportation of material from central to site store to field to Lab.
- Maintenance of C&I power supply units.
- Support during Lit up and Synchronization, interlock & protection
- Cleaning of actuators of all HFO, light oil valves and oil supply unit, attend air leakage, cleaning filters od gland and leak steam valves.
- Firemans aisles panel and scanner cooling and Gun sealing air system.
- Transmitter manifold replacement, Removal of sample coolers, Replacement of electrodes of analytical instruments.
- Replacement of colorimeter lamps/Electronic module ,Reagent tubes of silica analyzer
- Servicing Job of piston type actuator.
- Replacement/Repairing of tacho unit.
- Removal and fixing of printer/Link-CP /Multi RS/Plotter/Hardcopier/Console/Recorder.
- Replacement/Servicing of Rotameters/Sample filters.
- Coriolis flow meter.
- Removal and fixing of CRT/MS Clock ,replacement of modules/Lamps
- Maintenance of VFD in CHP.
- Sealing of cable glands, leakage arresting from impulse lines, Copper tubing as and when required, Laying of SS Tubes.

B. Secondary works: Maintenance of all the secondary instruments of the following types installed for the indication and recording purpose in the control room.

- Panel Indicator (4-20 mA)
 - Panel indicator (0-10 V)
 - Panel indicator (RTD & T/C Inputs)
 - Chartless recorder
 - Temperature Scanners
 - Assistance in checking, calibration and replacement of Procontrol/metsoDNA modules, Max modules.
 - Assistance in checking, calibration and replacements of recorders, cards of FSSS & other in the UCB & control desk.
 - Assistance in checking, calibration and replacements of recorders, cards of HPBP, APRDS, BOP, EAST, DDC and others as and when required.
 - Assistance in RC feeders control cabinets card, checking & other trouble shooting involved in RC feeders and others.
 - Checking and replacement of defective modules of PA system.
 - Assistance in checking, calibration and replacement of indicators and cards of PLC, Belt watch, Belt Weighing system and Safety Switches.
 - Laboratory Works: Checking /calibration and replacement of all the equipments associated with all fields as & when required, as per PM schedule or during capital overhaul.
 - Miscellaneous work: Daily sweeping, wiping and cleaning of Computer room & C&I panel room in both the units. External Cleaning of HMI computers, control desk, C&I panels as and when required.
 - Remote operation checking and identification of problem in field with coordination of concerned engineer.
- **Minimum manpower required:**
- Highly skilled – 25 nos.
 - Skilled – 01 no.
 - Semi-skilled – 02 nos.
 - Un-skilled – 05 nos.

(Signature & Seal of Bidder)

TENUGHAT VIDYUT NIGAM LIMITED
HINOO, DORANDA, RANCHI-834002.

BILL OF QUANTITY

PART - II (PRICE PART)

NIT NO- 21/C&I/W/TVNL/RAN /2024-25
SRM RFx No. - 1000010074

Sub: Round the clock Operation & Maintenance work of all field instruments and secondary instruments of C&I circle of 2*210 MW Units at TTPS, Lalpania for 1(one) year.

Sl. No.	Description of work	Quantity (Job)
1	Round the clock Operation & Maintenance work of all field instruments and secondary instruments of C&I circle of 2*210 MW Units at TTPS, Lalpania.	1 AU
1.1	Round the clock Operation & Maintenance work of all field instruments and secondary instruments of C&I circle of 2*210 MW Units at TTPS, Lalpania.	12 Mon

Note:

1. Total quoted cost will be the criteria for defining L₁ bidder
2. GST will be paid extra as applicable.
3. Price Part is not to be submitted in Hard copy.
4. Bidder has to bid for part-II (Price part) on TVNL web portal: <http://webdispatcher.tvnl.in/srmprd> only.

(Signature & Seal of Bidder)

NIT NO- 21/C&I/W/TVNL/RAN /2024-25
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Sub: Round the clock Operation & Maintenance work of all field instruments and secondary instruments of C&I circle of 2*210 MW Units at TTPS, Lalpania for 1(one) year.

SELF DECLARATION

(of the Head of the Firm In the Firm's Letter Head)

I S/o
..... Resident of At-
.....P.O.-..... P.S.-
..... Dist..... State-.....PIN -
.....do hereby solemnly affirm and declare as follows:-

1. That, I am aged about years. (Male Y/N / female Y/N).
2. That, I/we am/are proprietor/partner of the firm
..... At-
.....P.O.-.....P.S.-
.....Dist.....State-.....PIN
3. That, my firm not blacklisted or warned at the time of bid submission by any works department under Jharkhand Govt. / Govt. /Semi Govt./ CPSUs /SPSUs/SEB's.
4. That, above mentioned declaration along with documents submitted against the NIT no. **21/C&I/W/TVNL/RAN/2024-25** are true and correct to best of my knowledge, information and belief. Verified and signed aton
5. That, I have read and understood all the terms, conditions and scope of the work enlisted in the abovementioned Tender and will abide by them if the order is placed on our firm.

Signature with Firm seal

* SELF DECLARATION of the Head of the Firm duly filled with sign & firm seal attached with tender documents & its scanned copy may be attached online TVNL web portal: webdispatcher.tvnl.in/srmprd.