

U.P. Jal Vidyut Nigam Limited.



TENDER DOCUMENT FOR

NAME OF WORK

:- Annual Mechanical Maintenance work of Machine no. 1,2, and 3 of Khara Power House (24 x 3 MW) during Financial Year 2021-22.

TENDER NOTICE NO.

:- T-25/HGD/2021-22

**OFFICE OF THE EXECUTIVE ENGINEER
HYDEL GENERATION DIVISION,
U.P. JAL VIDYUT NIGAM LTD.
Khara, BADSHAHIBAG, SAHARANPUR – 247122**

कार्यालय अधिशासी अभियन्ता, जल विद्युत उत्पादन खण्ड
उ०प्र० जल विद्युत निगम लि०, खारा-बादशाहीबाग, सहारनपुर उ०प्र०।
पंजीकृत एवं कार्पोरेट कार्यालय:- 12वें तल शक्ति भवन विस्तार, 14 अशोक मार्ग, लखनऊ।

निविदा सूचना

सरकारी विभागों/निगमों में कार्यरत, समान कार्य के अनुभवी ठेकेदारों/फर्मों से निम्नलिखित कार्य हेतु दिनोंक 26.11.2021 तक अपरान्ह: 3:00 बजे तक वेबसाईट e-tender.up.nic.in पर e-tendering के माध्यम से निविदाये आमन्त्रित की जाती है। निविदा सम्बन्धी समस्त अभिलेख e-tender.up.nic.in की वेबसाईट पर दिनोंक 01.11.2021 अपरान्ह: 03:00 बजे से दिनोंक 26.11.2021 तक अपरान्ह: 03:00 बजे तक उपलब्ध रहेंगे, जहाँ पर ठेकेदारों द्वारा वेबसाईट पर ऑन लाईन अपनी निविदा दरें (मय टैक्निकल/फाइनेंशियल) डाली जायेगी। निविदा हेतु निर्धारित धरोहर धनराशि RTGS/NEFT के रूप में तथा निविदा मूल्य RTGS/NEFT के माध्यम से “अधिशासी अभियन्ता जल विद्युत उत्पादन खण्ड खारा-बादशाहीबाग, सहारनपुर के **(Punjab National Bank के खाता संख्या 1019001100000016 एवं IFSC- PUNB0101900)** में जमा कर साक्ष्य के रूप में यू०टी०आर० सं० की प्रति ई-टेण्डर प्रपत्रों के साथ ई-टेण्डर पोर्टल पर अपलोड करना अनिवार्य होगा। ऑन लाइन टैक्निकल बिड दिनोंक 27.11.2021 को अपरान्ह 12:00 बजे खोली जायेगी। टैक्निकल बिड क्वालीफाई करने वाले ठेकेदारों की ही फाइनेंशियल बिड खोली जायेगी। निविदाओं को बिना किसी कारण बताये निरस्त करने का अधिकार अद्योहस्ताक्षरकर्ता के पास सुरक्षित रहेगा। निविदा से सम्बन्धित विवरण निम्नवत् है:-

क्रम सं०	निविदा संख्या	कार्य का नाम	आगणन की धनराशि (लाख रु० में)	धरोहर राशि (रु० में)	टेण्डर का मूल्य (रु० में कर सहित)	कार्य अवधि
1.	T-24/ज०वि०उ०ख०/2021-22	Sealing of Intake gate and draft tube gate of machine no. 1,2 & 3 of Khara Power House	3.43	7000.00	590.00	30 दिन
2.	T-25/ज०वि०उ०ख०/2021-22	Annual Mechanical Maintenance of machine no. 1,2 & 3 of Khara Power House	7.84	16000.00	950.00	90 दिन (30 days for each machine)
3.	T-26/ज०वि०उ०ख०/2021-22	Annual Electrical Maintenance of machine no. 1,2 & 3 of Khara Power House	9.25	18500.00	1180.00	90 दिन (30 days for each machine)

अधिशासी अभियन्ता

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INSTRUCTIONS TO TENDERS

Tender No.	:- T-25/HGD/2021-22
Name of work	:- Annual Mechanical Maintenance work of Machine no. 1,2, and 3 of Khara Power House (24 x 3 MW) during Financial Year 2021-22.
Estimated cost	:- Rs. 07,83,825.00
Tender Cost	:- Rs. 950.00
Earnest Money	:- Rs. 16,000.00
Completion Period	:- 90 days (30 days for each machine)

1. Geographical Situation of site :

A. Khara Power House :-

3x24 MW capacity (Hydro) Khara Power House, Badshahibagh Distt- Saharanpur, 50 km far from Saharanpur city towards Saharanpur-Yamunotri Road, Nearest Railway station is Saharanpur.

The bidders are requested to make themselves fully conversant with the scope of work seeing working site, technical specification, general terms and conditions as per terms and conditions for the work contract for UPJVNL special terms and conditions etc. before submission of the tender and thereafter they should quote their rates in price schedule accordingly so that no ambiguity at later stage arise.

2. The tender must be submitted in two parts, known as part-I (pre-qualifications for opening of Part-II) and part-II (price bid) part-I of the tender shall be opened electrically in the presence of bidder's representatives, who choose to attend at the prescribed venue, date and time mentioned in tender notice. Part-II of tender shall be opened after the approval given by SE for only those bidders who have fulfilled the pre-qualifying conditions of the tender on the basis of documents submitted in Part-I of the tender opening date of the Part-II shall be informed later. Time of open the part-II will be remain same as in part-I , Part-II of the tender shall be opened electronically in the presence of bidder's representatives, who choose to attend at the prescribed venue, date and time.

3. A) E-bids (Technical and Financial) must be submitted by the bidders at e-procurement website <http://etender.up.nic.in> not later than as prescribed date and time in tender notice.

b) The purchaser may at this discretion, extends this deadline for submission of bids by amending the bid documents.

4. Late Bids

The server time indicated in the bid management window on the e-procurement website <http://etender.up.nic.in> will be the time by which the bid submission activity will be allowed till the permissible date and time schedule in the bidding. Once the bid submission period is over, the bidder cannot submit their bid. Bidder has to start the bid submission well in advance so that submission process is completed within the scheduled period. Failing which it shall be the bidder's responsibility.

5. Withdrawal and Re-submission of E-bids

- a. At point of time a bidder may withdraw their bid submitted online before the bid completion of bid submission period.
- b. The bidder has to request the purchaser with a letter, attaching the proof of withdrawal and submission of bid security/EMD in the office of purchaser for taking back the bid security EMD as per the manual procedure.
- c. The bidder can resubmit their bid as and when required till the scheduled bid submission end date and time. The bid submitted earlier will be replaced by the new one. The bid security submitted by the bidder earlier will be used of revised bid and the new bid submission summary generated after the successful submission of the revised bid will be considered for evaluation purpose.
- d. No bid can be resubmitted subsequently after the period for submission of bids is over.

7. Bidders are advised to study the bid document carefully. Submission of bids against the tender notice shall be deemed to have been done after careful study and examination of the procedure, terms and conditions stipulated in the bid documents with full understanding of its implications.
8. The bid document is available at e-procurement website <http://etender.up.nic.in> interested bidders may view, download the bidding document, seek clarification and submit their bid online up to the prescribed date and time through uploading on e-procurement website <http://etender.up.nic.in>.
9. The bidders are required to submit the cost of tender document as stated above through of RTGS/NEFT in account of Executive Engineer Hydel Generation Division Khara Badshahibagh Saharanpur (U.P.) (**Punjab National Bank A/c No. 1019001100000016 & IFSC- PUNB0101900**).
10. All bids must be accompanied by a bid Earnest Money Deposit in the form of RTGS/NEFT in account of Executive Engineer Hydel Generation Division Khara Badshahibagh Saharanpur (U.P.) (**Punjab National Bank A/c No. 1019001100000016 & IFSC- PUNB0101900**). The scanned copy of bid document fee Tender Cost & Earnest money must be up loaded electronically along with all the bid documents. The original of bid document fee, Earnest money with copy of all other required certificates and document should be furnished to the office of the Executive engineer Hydel Generation Division Khara Badshahibagh Saharanpur (U.P.) within schedule time. Failing which the bid shall not be considered/opened & is liable to be rejected.
11. The bids shall be electrically opened in the presence of bidder's representatives, who choose to attend, at the prescribed venue, date and time mentioned above.
12. The purchaser reserves the right to cancel any all the bids/annual the bidding process without assigning any reason thereof.
13. In the event of date specified for bids opening, being declared a holiday then bid shall be opened on next working day at schedule time.
14. All the required document shall be submitted/uploaded by the bidder electrically in the PDF format. However, the financial bid should be submitted in the XLS format.
15. No deviation from the Technical specification & Technical conditions shall be acceptable. The price bid of only those firms shall be opened who shall fulfill following pre-qualifying conditions. The tenderer are requested to submit the following document in support of the same in part-I of the tenders, failing which part-II (Price bid) of the tender shall not be opened.

A Tender Bid Part-I

PRE-QUALIFYING CONDITIONS

Tender Specification:- T-25/HGD/2021-22

Annual Mechanical Maintenance work of Machine no. 1, 2 and 3 of Khara Power House during F.Y. 2021-22

E-bids (Technical and Financial) must be submitted by the bidders at e-procurement website <http://etender.up.nic.in> not later than as prescribed date and time in tender notice.

Tender bid part-1 of tender should be uploaded against specified Tender No. “T-25/HGD/2021-22” containing the copies of following scanned documents duly signed & stamped by bidders.

1. Tenderer shall have to deposit the requisite amount of Tender Fee and earnest money as per tender notice in the desired shape. Any mode of transaction other than as mentioned in tender notice will not accept. Tenderer has to upload the receipt of the transaction.
2. The agreement on non-judicial stamp paper of Rs. 100/- or as applicable from time to time regarding validity of offer on prescribed Performa with the signature of two witness specifying name, profession and complete postal address of tenderers as well as witness.
3. Latest Income Tax clearance certificate /Return file for **2019-20** or later.
4. Copy of Labour license/registration issued by DLC, valid for work in Hydro Power Station.

or

In case Labour license issued by any other DLC valid for work other than Hydro Power Station, then the firm shall submit the following undertaking on non-judicial stamp paper of Rs. 10/- and shall comply with the same, in case LOI is issued in his favor.

“We shall submit Labour license issued by DLC,..... valid for Hydro Power Station within 30 days after issue of LOI, failing which LOI issued may be canceled and any penalty imposed by UPJVNL shall be acceptable.

Or

Undertaking if not applicable.

5. Self-Attested Latest financial turnover of the firm issued by the Bank/ chartered Accountant Average annual financial turnover during the last 3 year of Rs. 7.90 Lac.
6. Copy of LOI/Agreement of the similar nature of work executed different Power Station of SEB/UPJVNL/NTPC/ any other Government hydro Generating plant, which shall be:

Experience of having successfully completed similar work during last 7 year ending March 2021 should be either of the following:-

- I. Self-Attested copy of Three similar completed works costing not less than the amount equal to each of the Rs. 3.20 Lac
or
 - II. Self-Attested copy of Two similar completed works costing not less than the amount equal to each of the Rs. 3.95 Lac
or
 - III. Self-Attested copy of One similar completed works costing not less than the amount equal to each of the Rs. 6.30 Lac
- 7. Self-Attested copy of partnership deed in case tenderer is partnership firm. In case of limited company a copy of registration certificate issued by Registrar of Companies.
 - 8. Self-Attest copy of valid group insurance.
 - 9. Self-Attested Copy of EPF registration certificate or under taking if not applicable.
 - 10. Self-Attested copy of 16 digit PAN based computerized GST registration certificate must be enclosed.
 - 11. Self-Attested copy of valid character certificate issued by SP/DM.
 - 12. Self-Attested copy of Latest No dues certificate regarding house rent from civil construction division, Khara, Badshahibag and electricity charge from hydel generation division, Khara, Badshahibag or undertaking if not applicable.

Executive Engineer

B Tender Bid Part-II

1. This part of the tender will contain price bid only. Part-II of the tender shall be opened after approval given by Superintending Engineer, Hydel Generation Circle, Khara for only those bidders who have fulfilled the pre-qualifying conditions of the tender on the basis of documents, submitted in part-I of the tender. Opening date of the part-II shall be intimated later. Time of opening part-II of tender shall remain same as in part-I. Part-II of the tender shall also be opened electronically in the presence of bidder's representative, who chooses to attend, at the defined venue, date and time.
2. Rate should be quoted in figure & words exclusive of GST in prescribed Microsoft excel sheet. (i.e BOQ). If there is found any discrepancy between words and figures, the amount in words shall prevail. GST shall be paid extra as legally applicable.
3. The earnest money of un-successful bidders of the tender shall be returned to them after finalization of tender.
4. All the terms and conditions of UPJVNL form 'A' And 'B' shall also be applicable.
5. Conditional offer will not be accepted in any case and will be rejected immediately.
6. No request for consideration of earnest money from pending bills/security money/EMD shall be entertained. No tenderer shall be exempted from submission of EMD.

Validity of Offer:- The tender submitted by the bidders must be valid for a period of 6 months from the date of opening of tender.

Other conditions in regard to E-tender.

- I. If the opening date of the tender happens to be a holiday, the tender shall be opened on the next working day at the same time as mentioned in tender notice.
- II. After awarding the LOI, if any thing comes into notice regarding false/ forge documents submitted for fetching the tender or bidder involvement in mafia activity or threatening of other bidders or entrapping other bidders in participating in tender, the tender shall be cancelled and any loss to the Nigam on this account shall be the sole responsibility of the contractor. The action, in such cases, shall be taken as deemed fit.
- III. It may be noted that no request for extension in the due date of tender opening shall be entertained.
- IV. UPJVNL may revise or amend the specifications, drawing or any other documents forming part of the tender documents prior to the date notified for opening of the tenders. Such revision or amendment, if any will be communicated to all the tenderers as amendment to this invitation of tenders, in time.
- V. The tenderer to whom the work is awarded, shall execute a written agreement as specified above, with Executive Engineer, Hydel Generation Division, Badhshaibag on 100/- Rupees non-judicial stamp paper. (to be purchased by the contractor at his own name/ firm), after intimation by this office.
- VI. If any tenderer's rates are accepted and he does not turn up for agreement even after intimation the earnest money submitted by him shall be forfeited.

Executive Engineer

Signature of Contactor
With seal

DECLARATION

TENDER FORM

Name of the work :-

From:

To,

The Executive Engineer

Hydel Generation Division

U.P. Jal Vidyut Nigam Ltd.

Khara Badshahibagh Saharanpur U.P.

Dear Sir,

With reference to your invitation of tender for the above, I/We hereby offer to U.P. Jal Vidyut Nigam Ltd. The items in the schedule of price rate to the satisfaction of the purchaser or in default there-of-forfeit to pay to U.P. Jal Vidyut Nigam Ltd. The sum of money mentioned the said conditions.

The rates quoted are net and firm and in full satisfaction of all claims.

I/We agree to abide by this tender for a period of six months from the date fixed for opening of the same.

A sum of Rs. **In the form of** **as earnest money** in favour of the “Executive Engineer, Hydel Generation Division, U.P. Jal Vidyut Nigam Ltd. Khara Badshahibagh Saharanpur” is enclosed full value of which clause (3) of the said condition of contract.

I/We hereby undertake and agree to execute a contract in the form annexed here-to in accordance with the conditions of contract.

Dated:

Your's Faithfully

Witness:

Signature of Tenderer in full
With seal

SPECIAL CONDITIONS OF THE CONTRACT

NAME OF WORK : Annual Mechanical Maintenance work of Machine no. 1,2, and 3 of Khara Power House (24 x 3 MW) during Financial Year 2021-22

1. GENERAL

These special conditions of the contract shall be read and construed along with the annexed general conditions of contract form "A" (modified by the provision hereof) but if, there is any conflict or inconsistency between the provision hereof and those contained in general condition, the special conditions shall prevail.

2. SCOPE OF WORK :-

The scope of work involved, will be as per schedule of rates & quantity and technical specification as enclosed.

3. TIME FOR COMPLETION:-

The supply covered under scope of work shall be completed within 90 days as schedule in tender notice.

4. DATE OF START OF WORK:

The date of start of work under this contract shall be intimated by EE, HGD, Khara/duly authorised person.

5. LEVY OF PENALTY:-

As per slandered form 'A' & 'B' as case may be.

6. ACCIDENT/ DEATH OF WORKER:-

The contractor shall be responsible for payment of accidental benefit and compensation in case of death of any worker engaged by him, as per provision of rules/ order of the govt. under the compensation act, No. liability whatsoever will be acceptable by the U.P. Jal Vidyut Nigam Limited.

7. INSURANCE :-

As per Sl. No. 22 of Form "A".

8. PERMISSION FOR ENTERING INTO POWER STATION:-

The contractor shall obtain permission cards for himself and for his other engineers and staff/workers to enter into power station premises/ area for execution of the work. The contractor shall take full responsibility for the good conduct of his staff/ workers engaged for the execution of the job.

9. TERMINATION OF THE CONTRACT :-

On 15 days notice the contract can be terminated without given any notice. Also the contract can be terminated at any time in case it is found that the work is not being carried out to the satisfaction of the engineer-in-charge or the satisfaction of his representative. Under such condition, the complete work will be got done through other agency and all such extra expenditure incurred will be debited to the contractor's account.

10. TRANSPORTATION OF MEN & MATERIAL:-

Contractor will make his own arrangement for the transportation of his men and material to work sites and back. Site storage facility will be provided to the contractor free of cost.

11. INCOME TAX :-

(a) Income tax & other taxes shall be deducted from the bill as per rule.

(b) GST will be paid extra as per rule.

12. TERMS OF PAYMENT:-

(a) 90% payment shall be released after completion of work to the satisfaction of Engineer incharge.

(b) Balance 10% payment shall be released after expire of guarantee period or 100% payment shall be released on submitting FDR of balance 10%.

13. VARIATION IN QUANTITY OF WORK:-

The quantities may vary upto +10% on contract value but may be very up to any extent in lower side.

14. RATES :-

No escalation of rate over the finally accepted rates for escalation of the work shall be allowed during the pendency of contract.

OTHER TERMS AND CONDITIONS:-

- (a) The contractor shall remain liable to remove the defect that may develop in the works arising solely from the faulty workmanship.
 - (b) The engineer-in charge shall have the right object employment or presence of any person, labour employed by the contractor for non compliance, negligence, misconduct of being considered undesirable in the interest of work and of receipt of such of objection, the contractor shall be bound to remove such person from the work areas.
 - (c) The contractor shall not be entitled for any claim caused by removal of person(s) as aforesaid.
 - (d) If for some reason, the department is unable at any time to clear the site and the work has to be stopped, the contractor shall not be entitled to any monetary claim arising out of such circumstance. He shall how ever be granted time limit extension to the extent, for such period during which the work remained suspended.
 - (e) All the specification in respect of the entire item is subject to alternations as per direction in writing of the Engineer-in-charge. In case of any dispute regarding specification, the decision of Executive Engineer, Hydel Generation Division, Badshahibagh (Saharanpur) shall be final and binding.
15. The contractor shall be fully responsible for any sort of accident or injury to the labour while on duty and he will take all possible measures to ensure that no such event is occurred. However, in case of any accident of any nature, during the execution of the above work, the department will not be held responsible or liable to make any compensation to contractor's labour.
16. GENERAL:-
- 17.1 All the disputes arising out of and touching or relating to the subject or later on this agreement shall be subject to the jurisdiction of the local courts of Saharanpur and High Court of judicature at Allahabad.
- 17.2 All work out, replaced parts /scrap material shall be returned to the department.
- 17.3 In case of any loss or damage to Nigam's property during the execution of work due to negligence on the part of contractor's artisan / labour, the contractor has to bear the charges of these losses as assessed by the Executive Engineer, Hydel Generation Division, Khara, Badshahibagh (Saharanpur). In this regard, the decision of Executive Engineer will be final and binding on the part of contractor.
- 17.4 The contractor will observe all the rules and regulations of Factory, Act, Workman Compensation Act. Etc.
18. NOTICE TO CONTRACTOR :-
- Any notice to be given to the contractor may if the UP JVNL Engineer think fit be posted to his address or handed over to his authorized representative and such posting or acknowledgement shall be deemed to have been served such notice and the time mentioned and the general conditions for doing any act after notice should reach him in normal course.
19. If work allotted /awarded, a affidavit on stamp paper of Rs. 10.00 is to be submitted for exemption of stamp duty.

Executive Engineer

Signature of Contactor
With seal

Technical Specification / Scope of Work

**Annual Mechanical Maintenance work of Khara Power House
(3 x 24 MW) for Financial Year 2021-22**

1. Pump-Motor of Oil Pressure Unit System and turbine Guide Bearing:-

Overhauling of the pumps and motors, cleaning of oil chamber and replacing of gaskets and damaged elbow etc. from pipe line at Khara Power House. Details are as given below :-

- a) Over hauling of oil pump and motors. Dismantling, Cleaning and varnishing of winding and replacement of both end bearings, if found damaged. The bearings shall be replaced by the contractor at his own cost.
- b) Dismantling of oil pipe line and inserting the new gasket at each joint of pipe line shall be done. The gaskets shall be arranged by the Contractor.
- c) Cleaning of oil chamber and pressure accumulator tank by all cleaning material (Special industrial cleaning agent & markeen etc.). All cleaning material shall be arranged by the contractor.
- d) Adjustment of Turbine Guide Bearing Pads shall be done.
- e) Cleaning & Testing of 2 Nos. Turbine Guide Bearing Coolers shall be done. All cleaning material shall be arranged by the contractor.
- f) Re-tapping of all Tap Hole of Windows with existing tap size.
- g) Closing the Turbine Guide Bearing Cover with New Rubber seal and hardware and re-tapping of entire hole. Rubber seal and hardware shall be arranged by the Contractor.
- h) Replacement of shaft seal (Dismantling and assembling) and re-tapping of the entire tap holes with existing tap size.

2. Overhauling of Draft Tube drain valve:-

Overhauling of Draft Tube drain valve with operating mechanism of Machines at Khara Power House:-

- a) Overhauling of Draft Tube Drain Valve with operating mechanism shall be done.
- b) Dismantling of all the moving parts of Valve (operating Lever, Top cover and Valve Gate) shall be done.
- c) Cleaning of all parts with water and industrial cleaning agent shall be done. All cleaning material shall be arranged by the contractor.
- d) Assembling of Valve with operating lever with new hardware shall be done. Required Hardware shall be arranged by the Contractor.
- e) Painting of Valve cover, handle and Jali shall be done. All cleaning and painting material shall be arranged by the contractor.

3. Overhauling & repairing of various valves:-

Repairing and overhauling of various valves at different place including replacement of damaged spindle, rubber chord, nut bolts, studs, gland seal and repairing of seat of valves at Khara Power House.

- a) Dismantling of all water valves shall be done.
- b) Proper cleaning of the same shall be done.
- c) Repairing of complete valves for damaged valves shall be carried out.
- d) Re-assembling of the same with replacement of any damaged hardware with new one and seals shall be done. Required Hardware and seals shall be arranged by the contractor.

List of Valves:

• Main cooling inlet valve. (ø12")	-	1 No.
• Motorise valve (ø 12")	-	1 No.
• Strainer water supply change over valve.(ø 12")	-	2 Nos.
• (a) Strainer filling valve. (ø 80 mm)	-	1 No.
• (b) Strainer filling valve.(ø 40 mm)	-	1 No.
• Strainer drain valve heavy duty Brass make.(ø 80mm)	-	2 Nos.
• Strainer outlet valve. (ø 12")	-	1 No.
• Machine inlet cooling valve.(ø 10")	-	1 No.
• Turbine Guide bearing cooling inlet valve. (ø 4")	-	1 No.
• Turbine Guide bearing cooling outlet valve. (ø 4")	-	1 No.
• Shaft seal valve. (ø 40 mm)	-	1 No.
• Penstock drain valve. (ø 10")	-	
• Transformer cooling valve on filtration pipeline (ø 4")	-	3 No.
• Transformer cooling valve on pipeline from strainer (ø 4")	-	3 No.
• NRV on transformer cooling pipeline from Strainer	-	3 No.

4. Overhauling of Governing system:-**Overhauling of Governing System of all machines at Khara Power House :-**

- a) Dismantling of limit motor and pilot motor shall be done.
- b) Dismantling of Pilot valve, distributing valve and one way valve with strainer shall be done.
- c) Dismantling of Weight valve shall be done and the condition of wire rope shall be checked.
- i) Assembling Pilot valve, Distributing valve, Weight valve and one way valve after cleaning of malmal cloth shall be done. All cleaning material shall be arranged by the contractor.
- d) Assembling of limit motor and pilot motor after cleaning and varnishing.
- e) Dismantling of Activator shall be done and cleaning and greasing of the same shall be done. All cleaning material shall be arranged by the contractor.
- j) Cleaning of Governor oil tank with old dhori & Markeen cloth shall be done. All cleaning material shall be arranged by the contractor.
- f) Overhauling of both Non Return Valve and Gate Valve of Governor oil tank shall be carried out.
- g) Lapping of Gate Valves shall be done.
- h) Replacement old pin of Non Return Valve, Oil seal and 'O' Rings of main valve of Governor oil pressure line shall be done.
- k) Cleaning and varnishing of both Governor Pumps. All cleaning and varnishing material shall be arranged by the contractor.

5. Replacement of Guide vane Rubber cup seal :-**Replacement of Guide vane Rubber cup seal of three machines of Khara Power House.**

- a) Dismantling of Guide vane lever shall be done after opening of grease pipe line, guide vane link & locking key.
- b) Cleaning of mud, grease from housing shall be done and then bush housing shall be taken out.
- c) Replacement & fixing of all the existing rubber cup seals ID-150 mm & OD -180 mm with new one shall be done, if not, the payment shall be done as per actual work done at the site.
- d) Replacement of rubber Chord/round seal of Ø6mm /thickness after properly cleaning of groove shall be done.
- e) Assembly of all parts of guide vanes shall be done after fixing of bush housing & replacement of damaged nut & studs etc.
- f) Vertical bedding of guide vanes shall be properly aligned with neighboring guide vanes.
- g) All the consumables, T&P and manpower as required for proper completion of work shall be arranged by the contractor.

6. Repairing of Guide vane vertical surface :-

Repairing of Guide vane vertical surface of three machines of Khara Power House.

- a) Penstock window shall be opened by losing the bolts.
- b) Cleaning of mud and grease from guide vanes shall be done.
- c) Checking the gap between guide vanes in closed position.
- d) Filling the surface of guide vanes by SS welding, wherever required..
- e) Chipping, Grinding of the excess material from the surface of guide vanes shall be done to maintain the profile.
- f) Profiling of guide vanes shall be done till the time the required surface profile is not achieved.
- g) Matching of the guide vanes surface shall be done.
- h) Closing the penstock window.

Note:- All the material, consumables, T&P and manpower, as required for proper completion of work, shall be arranged by the contactor at his own cost.

Executive Engineer

SCHEDULE OF RATES & QUANTITIES

TENDER SPECIFICATION NO. :-T-25/HGD/2021-22

NAME OF WORK :- Annual Mechanical Maintenance work of Machine no. 1,2, and 3 of Khara Power House (24 x 3 MW) during Financial Year 2021-22.

Sl. No.	Particulars	Qty.	Unit Price (Rs.)	Total Amount (Rs.)
1.	Lubricating Oil System	03 Job		
2.	Overhauling of Draft Tube drain valve	03 Job		
3.	Overhauling & repairing of various valves	03 Job		
4.	Overhauling of Governing system	03 Job		
5.	Replacement of Guide vane Rubber cup seal of machines	03 Job		
6.	Repairing of Guide vanes	03 Job		
7.	Cleaning of Silt, sand and mud deposited in turbine pit of machine for proper facilitation and completion of the works	03 Job		
8.	Less Scrap	-		
Total				

(Rs. In word).....

नोट:- निविदादाता द्वारा विभागीय लागत से कम लागत की निविदा डालने की दशा में शासनादेश सं0 622/23.12.2012/2 आडिट/08/टीसी-2, दिनांक 08.06.2012 के अनुसार 10 प्रतिशत तक न्यूनतम दरें (Below rate) डालने पर 0.50 प्रतिशत प्रति 1 प्रतिशत कम दर पर तथा 10 प्रतिशत से अधिक न्यूनतम दरें (Below rate) पर 1 प्रतिशत प्रति 1 प्रतिशत कम दर पर प्रफॉर्मेन्स गारन्टी की अतिरिक्त धरोहर धनराशि जमा करने के उपरान्त अनुबन्ध गठित किया जायेगा। निविदा दाता द्वारा उक्त धनराशि जमा न किये जाने पर उसकी धरोहर धनराशि जब्त कर अग्रिम कार्यवाही की जायेगी।

Executive Engineer

Signature of Contactor
With seal