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TENDER SPECIFICATION

TENDER NO. BHEL/ NR/SCT/ PARBATI-II/E-MANUAL/897

FOR

**"PREPARATION OF INTERACTIVE ERECTION E-MANUAL
(SOFTWARE BASED) OF HYDRO TURBINE & ITS
AUXILIARIES FOR 4X200 MW PARBATI-II HEP."**

PART I – TECHNICAL BID



**Bharat Heavy Electricals Limited
(A Govt. Of India Undertaking)
Power Sector – Northern Region,
Plot No. 25 , Sector - 16A ,
Distt. Gautam Budh Nagar, NOIDA – 201 301.INDIA**



**ISO 9001, ISO 14001,
OHSAS 18001 & SA 8000
certified company
SubContract and Purchase
Deptt.**

**Bharat Heavy Electricals Limited
(A Govt. Of India Undertaking)
Power Sector – Northern Region,
Plot No. 25 , Sector - 16A ,
Distt. Gautam Budh Nagar, NOIDA – 201 301(INDIA)
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IMPORTANT NOTE

PURCHASER OF THIS TENDER DOCUMENT IS ADVISED TO CHECK AND ENSURE COMPLETION OF ALL PAGES OF TENDER DOCUMENT AND REPORT ANY DISCREPANCY TIMELY FOR CORRECTIVE ACTION, IF ANY, TO THE ISSUING AUTHORITY BEFORE THE BIDS ARE SUBMITTED. ORIGINAL COPY OF TENDER DOCUMENT COMPLETE IN ALL RESPECTS MUST BE SUBMITTED BACK AS PART OF THE BID WITHOUT WHICH THE SAME IS LIABLE TO BE REJECTED BY BHEL.

THIS TENDER SPECIFICATION ISSUED TO:

M/S-----

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TENDER NOTICE

Sealed tenders are invited, in line with these tender Documents for the Works of “Preparation of interactive erection E-manual (software based) of hydro turbine & its auxiliaries for 4X200 MW Parbati-II HEP.”

QUALIFYING REQUIREMENTS

A	Submission of Integrity Pact duly signed (if applicable)	Not Applicable
B	Assessment of Capacity of Bidder to execute the work	Not Applicable
C	<u>TECHNICAL CRITERIA</u>	
	Tenderers who wish to participate should have prepared minimum one number interactive erection e-manual (Software based) of hydro turbine OR hydro generator of Hydro Power station during last three years as on date of bid submission	
D	<u>FINANCIAL CRITERIA</u>	
D1	Tenderers should have an average annual turnover of minimum of Rs 22 Lacs (Rupees Twenty two Lacs Only) based on the audited accounts of last three financial years (2009-10, 2010-11, 2011-12). Bidders shall submit audited annual accounts (balance sheets and profit & loss account) in support of this.	
D2	NETWORTH Net worth of the Bidder based on the latest Audited Accounts as furnished for ‘D1’ above should be positive.	
D3	PROFIT Bidder must have earned cash profit in any one of the three Financial Years as applicable in the last three years defined in	

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	'D1' above based on latest Audited Accounts. (Releant documents, meeting above requirements at C & D, shall be submitted)	
E	Approval of Customer (if applicable) Note: Names of bidders who stand qualified after compliance of criteria A to E shall be forwarded to customer for their approval. Price bid of only those bidders shall be opened who are approved by customer.	Not Applicable
NOTES: (1) If the Qualifying work is executed in the last three years period, as specified above, even if it has been started earlier, the same will also be considered meeting the qualifying requirements.		

GENERAL NOTES:

1. The Tender Documents comprise of following;
 - (a) **Part-I –Technical Bid:** Consisting of Tender Notice, Procedure for submission, Project Synopsis, Technical specifications including Special Conditions of Contract, General Conditions of contract, etc.
 - (b) **Part-II –Price Bid :** Consisting of Rate Schedule for subject work.
2. Tender Documents with complete details are hosted on BHEL's web page www.bhel.com. Bidder(s) intending to participate may download the tender document from the web site. Bidder(s) downloading the tender documents from the web site, shall remit Rs.2000/- (Rupees Two thousand only) in the form of crossed demand draft (non-refundable), in favour of BHEL, NOIDA along with their offer.
3. Bidder(s) can also purchase hard copy of tender documents from this office. Tender documents (non transferable) will be issued on all working days between 09.30 Hrs. to 12.30 Hrs within the sale period i.e **upto 31.01.2013** on payment of Rs.2,000/- (non-refundable) either in cash or by crossed demand draft in favour of BHEL, NOIDA. Request for issue of tender document should clearly indicate Tender No. and work.
4. Tenders must be submitted latest by 15:00 Hrs. (Indian Standard Time) on **31.01.2013**. Technical bids shall be opened at 15.30 Hrs. on **31.01.2013**. Tenders received after the due date & time shall be liable to be summarily rejected.
5. BHEL takes no responsibility for any delay/loss of documents or correspondences sent by courier/post.
6. Earnest Money Deposit (EMD): Refundable, Non-interest bearing EMD of Rs. 20,000/- shall be deposited by Account Payee Pay Order 'OR' Demand Draft

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- in favour of " Bharat Heavy Electricals Limited" payable at Delhi/NOIDA. Those bidders who have already deposited 'One Time 'EMD' of Rs. 2, 00,000/- with BHEL, PSNR, NOIDA need not submit EMD with the present tender.
7. Tenders not accompanied with Full Earnest Money Deposit, as indicated above, will not be considered.
 8. **All corrigenda, addenda, amendments and clarifications to this Tender will be hosted in the related web page and not in the newspaper. Bidders shall keep themselves updated with all such amendments.**
 9. BHEL reserves the right to accept or reject any 'OR' all tenders without assigning any reason whatsoever.
 10. No Reverse Auction process is envisaged for this enquiry and **Conventional Sealed Price bid opening process shall be applicable. As such, the bidders should submit their best prices in the 'Sealed Price Bid'.**
 11. Contractor shall fully understand description and scope of work before quoting. The scope of work and responsibility of the contractor as mentioned under this specification shall be covered within the quoted / finally accepted rates.

Engineer /SCT



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PROCEDURE FOR SUBMISSION OF SEALED TENDERS:

The tenderers must submit their tenders as required in **two parts** in separate sealed covers **prominently superscribed as Part-I Technical bid and Part-II, Price bid** also indicating on each of the cover tender specification no., date and time as mentioned in tender notice.

TECHNICAL BID (COVER-I)

Except **Price bid Part-II**, complete set of tender document consisting of “Technical specification & Special terms and condition” including General conditions of Contract (Part-I) issued by BHEL shall be enclosed in **Part I Technical Bid only**. Earnest Money as applicable shall also be submitted alongwith Technical Bid. All schedules, data sheets and details called for in the specification shall also be submitted along with technical bid. All details / Data / Schedules including offer letter duly signed and stamped are to be **submitted in duplicate**.

PRICE BID (COVER-II)

Tenderers may please note that price bid is **to be submitted only in original copy** of Tender i.e. Price bid (Part-II) issued by BHEL and no duplicate copy of same is required.

These Two separate covers i.e. cover I & II shall together be enclosed in a **third envelope (Cover-III)** and this sealed cover shall be superscribed with tender specification No., due date, time and submitted to officer inviting tender as indicated in tender notice on or before due date as indicated.

PROJECT SYNOPSIS

1.1. INTROUCTION

NHPC LIMITED, with their headquarters at NHPC Office Complex, Sector 33, Faridabad-121003, Haryana has placed an order on BHEL for E&M package of 4X200MW PARBATI-II Hydro Electric Project.

PARBATI-II Hydro Electric Project is a run of the river scheme on Parbati river in Kullu district of Himachal Pradesh state. 4 Nos. of vertical shaft generating units of 4X200MW with Pelton turbines are to be installed in surface Power House.

Power House of 4X200 MW PARBATI-II HEP is at Sainj in Kullu district of Himachal Pradesh state of India. Power House site of Parbati II HEP is approx. 40 KM from nearest airport at Bhunter and approx. 190 KM from nearest broad gauge rail head at Kiratpur. The project is located at sainj which is about 25 KM from AUT on Chandigarh-Manali National Highway NH21 at a distance of 260 km from Chandigarh.

1.2. CLIMATIC CONDITIONS

Temperature: In winter, the temperature can drop below freezing point when heavy woolens are required. In summer the temperature rises upto 40 degrees.

Technical specifications & special conditions of contract

1.0 General Scope

The scope of work involves preparation of comprehensive e-manuals for installation of Hydro Turbine, Hydro Generator, MIV, BFV and Auxiliaries for Parbati Stg-II HEP (4X200MW).

1.1 Scope of Work

- 1.1.1 Preparation of e-Manuals for installation of Hydro turbine, Hydro Generator, MIV, BFV and Auxiliaries for Parbati Stg-II HEP.
- 1.1.2 Ten Soft copies (CD/DVD) of Manuals with dynamic navigation features as per specification.
- 1.1.3 AVI files for demonstration of assembly and dismantling of major parts with names of important major parts/assemblies of Turbine, Generator, MIV and BFV.
- 1.1.4 AVI files showing Turbine, Generator, MIV, BFV and Governor Operations.
- 1.1.5 Ten hard copies of the manuals with illustrations (Sketches, drawings)
- 1.1.6 **The E-Manuals will be a self executable program compatible with Windows XP & Windows Vista operating system.**
- 1.1.7 The detailed technical specifications for preparation of E-manuals shall be as per Annexure-A of this tender enquiry.
- 1.1.8 If required, the supplier will be free to visit site at his own expense. However during site visit, field hostel accommodation (at site only) and local transport at site will be arranged by BHEL.
- 1.1.9 Any bugs/glitches encountered during operation of the software will be attended by the vendor without any extra cost to BHEL.

1.2 Documents & training to be provided by the contractor

- 1.2.1 **To prepare a Software Requirements (SRS) Report** – Based on an independent assessment of the requirement of BHEL and the functional requirements as specified by BHEL for introducing E-manual software at BHEL PSNR hydro sites. The E-manual shall be used for installation of hydro turbine, Generator,

MIV, BFV and the E-Manual will have provisions to navigate in the manual through hyperlinks provided in the Index as well as at other places. Hyperlinks shall also be provided to dynamically view the main assembly drawings for Turbine, Generator, MIV and BFV. The E-manual on erection of turbine, Generator, MIV & BFV will employ user friendly interactive software to illustrate the functioning of the turbine, Generator equipment & auxiliaries and MIV, BFV. The preparation of 3D models of various components and assembly of Turbine Generator, MIV & BFV in AVI format

from soft copy of 2D drawings supplied by BHEL. The solid Models shall be sufficiently descriptive and illustrative.

In addition to the above the manuals shall also depict the sequence of erection in a flow diagram. The special processes during erection will be shown in animation/graphics.

- 1.2.2 The contractor shall demonstrate the use of E-manual and shall impart the training to BHEL personnel, as applicable.
- 1.2.3 Ten hard copies of e-Manuals for erection will be in the form of hard copy and ten soft copies i.e. in DVD/C.D will be provided by Supplier. Hard copies should be illustrative to be used as a guide for erection engineers at site. After completion of the contract the E-manuals will become property of BHEL. The supplier will have no copy right over it.

1.3 Inputs to be provided by BHEL

- 1.3.1 BHEL will supply the assembly drawings and other details of Turbine ,Generator, MIV , BFV and auxiliaries. The documents handed over to supplier shall be used only for the current contract and will not be used for any other purpose and shall be returned to BHEL after completion of the contract.
- 1.3.2 For detailing of installation procedure any additional inputs/resources required will be arranged by the supplier.

1.4 Technical Requirements

- 1.4.1 The E-Manuals will be a self-executable program compatible with Windows XP & Windows Vista operating system.

2.0 Terms of payment

For Item No. 1 of Rate Schedule

- (i) 90% on preparation of E-manuals and submission of its hard and soft copies as per the contract and its successful demonstration certified by BHEL Engineer.
- (ii) Balance 10% will be paid within 30 days of successful demonstration certified by BHEL Engineer.

3.0 Rate Schedule

- 3.1 The tenderer shall quote the rates as per the rate schedule only, in part II price bid (Original). Conditional price bid with any deviation / clarification etc. are liable to be rejected. No cutting / erasing / over writing shall be done.
- 3.2 Contractor shall fully understand scope of work before quoting. The scope of work and responsibility of the contractor as mentioned under these specifications shall be covered within the quoted rates.

4.0 TAXES & DUTIES:

The contractor shall pay all (save the specific exclusions as enumerated in this contract) taxes, fees, license charges, deposits, duties, tools, royalty, commissions or other charges which may be levied on the input goods & services consumed and output goods & services delivered in course of his operations in executing the contract. In case BHEL is forced to pay any of such taxes, BHEL shall have the right to recover the same from his bills or otherwise as deemed fit.

However, provisions regarding **Service Tax** on out put services shall be as per following clauses:

4.1 Service Tax & Cess on Service Tax.

Service Tax and Cess on Service Tax as applicable on output Services are excluded from contractor's scope; therefore contractor's price/rates shall be **exclusive** of Service Tax and Cess on Output Services. Contractor shall obtain prior written consent of BHEL before billing the amount towards such taxes.

Contractor shall submit to BHEL documentary evidence of Service Tax registration certificate specifying name of services covered under this contract

For the purpose of claiming any Service Tax from BHEL, the following procedure shall be adopted:

Contractor shall submit serially numbered Service Tax Invoices, signed by him or a person authorized by him in respect of taxable service provided, and shall contain the following, namely:

1. The name, address and registration number of the contractor
2. The name and address of the party receiving taxable service (BHEL)
3. Description, classification and value of taxable service provided and
4. The Service Tax & Cess payable thereon.

All the four conditions shall be fulfilled in the invoice for payment of Service Tax by BHEL. Where more than one nature of Service under Service Tax Rules is involved, the invoice mentioned above shall contain the break up of all values for each nature of Service

4.2 New Taxes/Levies:

In case the Government imposes any new levy/tax on the output service/goods/work after award of the contract, the same shall be reimbursed by BHEL at actual.

In case any new tax/levy/duty etc. becomes applicable after the date of Bidder's offer, the Bidder/Contractor must convey its impact on his price duly substantiated by documentary evidence in support of the same before opening of Price Bid. Claim for any such impact after opening the Price Bid will not be considered by BHEL for reimbursement of tax or reassessment of offer.

No reimbursement/recovery on account of increase/reduction in the rate of taxes, levies, duties etc. on input goods/services/work shall be made. Such impact shall be taken care of by the Price Variation/Adjustment Clause (PVC) if any. In case PVC is not applicable for the contract, Bidder has to make his own assessment of the impact of future variation if any, in rates of taxes/duties/ levies etc. in his price bid.

5.0 TIME SCHEDULE:

5.1 The Contractor shall contact GM(Hydro)), BHEL, PSNR, Noida (U.P), within 5 days from the date of award of work to fix up schedule for commencement of

work. The delivery period is 20 weeks from the date of LOI and supply of Drawings & Documents whichever is later.

- 5.2 The preparation of E-manuals under the scope of this contract is deemed to be completed in all respects, only when the contractor has discharged all the responsibilities laid down in the contract. The decision of BHEL on completion date shall be final and binding on the contractor.

6.0 SUSPENSION OF BUSINESS DEALINGS:

BHEL reserves the right to take action against contractors who fail to perform or indulge in malpractices, by suspending business dealings with them.

Once the order for suspension is passed, existing offers/new offers of the contractor shall not be entertained.

7.0 GENERAL INSTRUCTION TO TENDERERS:

7.1 DESPATCH INSTRUCTION:

- i) The General Conditions of Contract form part of the Tender specifications. All pages of the tender documents shall be duly signed, stamped and submitted along with the offer in token of complete acceptance thereof. The information furnished shall be complete by itself. The tenderer is required to furnish all the details and other documents as required in the following pages.
- ii) Tenderers are advised to study all the tender documents carefully. Any submission of tender by the tenderer shall be deemed to have been done after careful study and examination of the tender documents and with the full understanding of the implications thereof. Should the tenderers have any doubt about the meaning of any portion of the Tender Specification or find discrepancies or omissions in the drawings or the tender documents issued are incomplete or shall require clarification on any of the technical aspect, the scope of work etc., he shall at once, contact the authority inviting the tender well in time (so as not to affect last date of submission) for clarification before the submission of the tender. Tenderer's request for clarifications shall be with reference to Sections and Clause numbers given in the tender documents. The specifications and terms and conditions shall be deemed to have been accepted by the tenderer in his offer. Non compliance with any of the requirements and instructions of the tender enquiry may result in the rejection of the tender.

7.2 SUBMISSION OF TENDERS:

7.2.1 The tenderers must submit their tenders at **BHEL PSNR OFFICE NOIDA.**

7.2.2 Tenders submitted by post shall be sent by 'REGISTERED POST ACKNOWLEDGEMENT DUE / by COURIER' and shall be posted with due allowance for any postal/courier delays. BHEL takes no responsibility for delay, loss or non-receipt of tenders sent by post/courier. The tenders

received after the specified time of their submission are treated as 'Late Tenders' and shall not be considered under any circumstances.

- 7.2.3 Tenderers whose bids are found techno commercially qualified shall be informed the date and time of opening of the Price Bids and such Tenderers may depute their representatives to witness the opening of the price bids. BHEL's decision in this regard shall be final and binding.
- 7.2.4 Before submission of Offer, the tenderers are advised to inspect the site of work and the environments and be well acquainted with the actual working and other prevalent conditions, facilities available, position of material and labour, means of transport and access to Site, accommodation, etc. No claim will be entertained later on the grounds of lack of knowledge of any of these conditions.
- 7.2.5 Tenders shall be opened by authorised Officer of BHEL at his office at the time and date as specified in the NIT, in the presence of such of those tenderers or their authorised representatives who may be present

7.3 LANGUAGE:

- 7.3.1** The tenderer shall quote the rates in English language and international numerals. These rates shall be entered in figures as well as in words. For the purpose of the tenders, the metric system of units shall be used.
- 7.3.2** All entries in the tender shall either be typed or written legibly in ink. Erasing and over-writing is not permitted and may render such tenders liable for rejection. All cancellations and insertions shall be duly attested by the tenderer.

7.4 PRICE DISCREPANCY:

- 7.4.1 Conventional (Manual) Price Bid opening:** In the case of price bid opening without resorting to Reverse Auction, if there are differences between the rates given by the tenderer in words and figures or in amount worked out by him, the following procedure for evaluation and award shall be followed:
- i) When there is a difference between the rates in figures and in words, the rates which corresponds to the amounts worked out by the contractor, shall be taken as correct
 - ii) When the amount of an item is not worked out by the contractor or it does not correspond with the rate written either in figure or in words, then the rate quoted by the contractor in words shall be taken as correct
 - iii) When the rate quoted by the contractor in figures and words tallies but the amount is not worked out correctly, the rate quoted by the contractor shall be taken as correct and not the amount.
 - iv) In case of lumpsum price, if there is any difference between the amount in figures and in words, the amount quoted by the bidder in words shall be taken as correct.

- v) In case of omission in quoting any rate for one or more items, the evaluation shall be done considering the highest quoted rate obtained against the respective items by other tenderers for the subject tender. If the tenderer becomes L-1, the notional rates for the omission items shall be the lowest rates quoted for the respective items by the other tenderers against the respective omission items for the subject job and the 'Total quoted price (loaded for omissions)' shall be arrived at. However the overall price remaining the same as quoted originally, the rates for all the items in the 'Total quoted price (loaded for omissions)' shall be reduced item wise in proportion to the ratio of 'Original' total price and the 'Total quoted price (loaded for omissions)'".

7.5 AUTHORISATION AND ATTESTATION:

Tenders shall be signed by a person duly authorized/empowered to do so. An attested copy of the Power of Attorney/ an authorization letter in company's letter head, in case the tender is signed by an individual other than the sole proprietor shall be submitted along with the tenders.

7.6 EARNEST MONEY DEPOSIT:

- (a) Every tender must be accompanied by the prescribed amount of Earnest Money Deposit (EMD) in the manner described herein.
- i) EMD shall be furnished along with the offer in full as per the amount indicated in the Special Conditions of Contract / NIT
 - ii) EMD is to be paid in cash (as permissible under Income Tax Act), Pay order or Demand Draft in favour of 'Bharat Heavy Electricals Limited' and payable at Regional HQ issuing the tender.
 - iii) No other form of EMD remittance shall be acceptable to BHEL
 - iv) Bidder may opt to deposit "One Time EMD" of Rs. 2.0 lakhs (Rupees Two lakhs only) with BHEL:Power Sector Northern Region HQ issuing the tender, which will enable them to participate in all the future tender enquiries in respect of Erection and Commissioning services issued from the respective office. Interested bidders may clearly send their consent for converting the present EMD into a "One Time EMD" in their offer.
 - Note : The 'One Time EMD' cannot be withdrawn by the tenderers within 3 years from the date of deposit, under any circumstances. The Tenderer who wishes to withdraw after three years will not be allowed to submit 'One Time EMD' again.
 - v) Bidders who have already deposited such "One Time EMD" of Rs. 2.00 lakh are exempted from submission of EMD for this tender. However a copy of 'One Time EMD' certificate issued by BHEL PSNR HQ issuing the tender shall be enclosed along with the offer.
- (b) EMD by the bidder will be forfeited as per Tender Documents if
- i) After opening the tender, the bidder revokes his tender within the validity period or increases his earlier quoted rates.
 - ii) The bidder does not commence the work within the period as per LOI/Contract. In case the LOI / contract is silent in this regard then within 15 days after award of contract.

- (c) EMD shall not carry any interest.
(d) In the case of unsuccessful bidders, the Earnest Money will be refunded to them within a reasonable time after acceptance of award by successful tenderer.

7.7 SECURITY DEPOSIT:

7.7.1 Upon acceptance of Tender, the successful Tenderer should deposit the required amount of Security Deposit for satisfactory completion of work, as per the rates given below:

SN	Contract Value	Security Deposit Amount
1	Up to Rs. 10 lakhs	10% of Contract Value
2	Above Rs. 10 lakhs upto Rs.50 lakhs	1 lakh + 7.5% of the Contract Value exceeding Rs. 10 lakhs.
3	Above Rs. 50 lakhs	Rs 4 lakhs + 5% of the Contract Value exceeding Rs. 50 lakhs.

7.7.2 The security Deposit should be furnished before start of the work by the contractor.

7.7.3 Security Deposit may be furnished in any one of the following forms

- i) Cash (as permissible under the Income Tax Act)
- ii) Pay Order / Demand Draft in favour of BHEL.
- iii) Local cheques of scheduled banks, subject to realization.
- iv) Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc. (Certificates should be held in the name of Contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back).
- v) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format for Security Deposit shall be in the prescribed formats
- vi) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the contractor, A/C BHEL, duly discharged on the back.
- vii) Security deposit can also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of the Security Deposit should be deposited in any form as prescribed before start of the work and the balance 50% may be recovered from the running bills.
- viii) EMD of the successful bidder can be converted and adjusted against the cash portion of Security Deposit excepting for such bidders who have remitted One Time EMD.

NOTE: Acceptance of Security Deposit against Sl. No. (iv) and (vi) above will be subject to hypothecation or endorsement on the documents in favour of BHEL. However, BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

- 7.7.4 The Security Deposit shall not carry any interest.
- 7.7.5 In case the value of work exceeds / reduces from the awarded / accepted value, the Security Deposit shall be correspondingly enhanced / reduced and the enhanced part of the Security Deposit shall be immediately deposited by the Contractor or adjusted against payments due to the Contractor
- 7.7.6 The validity of Bank Guarantees towards Security Deposit shall be initially upto the completion period as stipulated in the Letter of Intent/Award + 3 months, and the same shall be kept valid by proper renewal till the acceptance of Final Bills of the Contractor, by BHEL
- 7.7.7 BHEL reserves the right of forfeiture of Security Deposit in addition to other claims and penalties in the event of the Contractor's failure to fulfill any of the contractual obligations or in the event of termination of contract as per terms and conditions of contract. BHEL reserves the right to set off the Security Deposit against any claims of other contracts with BHEL.

7.8 VALIDITY OF OFFER:

The rates in the Tender shall be kept open for acceptance for a minimum period of **SIX MONTHS** from latest due date of offer submission (including extension, if any). In case BHEL (Bharat Heavy Electricals Ltd) calls for negotiations, such negotiations shall not amount to cancellation or withdrawal of the original offer which shall be binding on the tenderers.

7.9 EXECUTION OF CONTRACT AGREEMENT:

The successful tenderer's responsibility under this contract commences from the date of issue of the Letter of Intent/Award by Bharat Heavy Electricals Limited. The Tenderer shall submit an unqualified acceptance to the Letter of Intent/Award within the period stipulated therein.

7.10 REJECTION OF TENDER AND OTHER CONDITIONS:

- 7.10.1 The acceptance of tender will rest with BHEL which does not bind itself to accept the lowest tender or any tender and reserves to itself full rights for the following without assigning any reasons whatsoever:-
- a. To reject any or all of the tenders.
 - b. To split up the work amongst two or more tenderers as per NIT
 - c. To award the work in part if specified in NIT
 - d. In case of either of the contingencies stated in (b) and (c) above, the time for completion as stipulated in the tender shall be applicable.

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- 7.10.2 Conditional tenders, unsolicited tenders, tenders which are incomplete or not in the form specified or defective or have been materially altered or not in accordance with the tender conditions, specifications etc., are liable to be rejected.
- 7.10.3 Tenders are liable to be rejected in case of unsatisfactory performance of the tenderer with BHEL, or tenderer under suspension (hold/banning /delisted) by any unit / region / division of BHEL .
- 7.10.4 If a tenderer who is a proprietor expires after the submission of his tender or after the acceptance of his tender, BHEL may at their discretion, cancel such tender. If a partner of a firm expires after the submission of tender or after the acceptance of the tender, BHEL may then cancel such tender at their discretion, unless the firm retains its character.
- 7.10.5 BHEL will not be bound by any Power of Attorney granted by changes in the composition of the firm made subsequent to the execution of the contract. They may, however, recognise such power of Attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the contractor concerned.
- 7.10.6 If the tenderer deliberately gives wrong information in his tender, BHEL reserves the right to reject such tender at any stage or to cancel the contract if awarded and forfeit the Earnest Money/Security Deposit/any other money due.
- 7.10.7 Canvassing in any form in connection with the tenders submitted by the Tenderer shall make his offer liable to rejection.
- 7.10.8 In case the Proprietor, Partner or Director of the Company/Firm submitting the Tender, has any relative or relation employed in BHEL, the authority inviting the Tender shall be informed of the fact as per specified format, along with the Offer. Failing to do so, BHEL may, at its sole discretion, reject the tender or cancel the contract and forfeit the Earnest Money/Security Deposit.
- 7.10.9 The successful tenderer should not sub-contract part or complete work detailed in the tender specification undertaken by him without written permission of BHEL's Construction Manager/Site Incharge. The tenderer is solely responsible to BHEL for the work awarded to him.
- 7.10.10 The Tender submitted by a techno commercially qualified tenderer shall become the property of BHEL who shall be under no obligation to return the same to the bidder. However unopened price bids and late tenders shall be returned to the bidders
- 7.10.11 Unsolicited discount received after the due date and time of Bid Submission shall not be considered for evaluation. However, if the party who has submitted the unsolicited discount/rebate becomes the L-I party, then the awarded price i.e contract value shall be worked out after considering the discount so offered.

7.10.12 BHEL shall not be liable for any expenses incurred by the bidder in the preparation of the tender irrespective of whether the tender is accepted or not.

8.0 GENERAL CONDITIONS OF CONTRACT:

8.1 COMMENCEMENT OF WORK:

8.1.1 The contractor shall commence the work in line with "Time Schedule" Clause as indicated in "Technical specifications & special conditions of contract".

8.1.2 If the contractor fails to start the work within stipulated time as per LOI or as intimated by BHEL, then BHEL at its sole discretion will have the right to cancel the contract. The Earnest Money and/or Security Deposit with BHEL will stand forfeited without any further reference to him without prejudice to any and all of BHEL's other rights and remedies in this regard.

8.1.3 All the work shall be carried out under the direction and to the satisfaction of BHEL.

8.2 RIGHTS OF BHEL:

BHEL reserves the following rights in respect of this contract during the original contract period or its extensions if any, as per the provisions of the contract, without entitling the contractor for any compensation.

8.2.1 To withdraw any portion of work and/or to restrict/alter quantum of work as indicated in the contract during the progress of work and get it done through other agencies to suit BHEL's commitment to its customer or in case BHEL decides to advance the date of completion due to other emergent reasons/ BHEL's obligation to its customer.

8.2.2 To terminate the contract or get any part of the work done through other agency or deploy BHEL's own/hired/otherwise arranged resources , at the risk and cost of the contractor after due notice of a period of two weeks by BHEL, in the event of:-

- i) Contractor's continued poor progress
- ii) Withdrawal from or abandonment of the work before completion of the work
- iii) Contractor's inability to progress the work for completion as stipulated in the contract
- iv) Poor quality of work
- v) Corrupt act of Contractor
- vi) Insolvency of the Contractor
- vii) Persistent disregard to the instructions of BHEL

- viii) Assignment, transfer, sub-letting of contract without BHEL's written permission
- ix) Non fulfillment of any contractual obligations
- x) In the opinion of BHEL, the contractor is overloaded and is not in a position to execute the job as per required schedule

- 8.2.3 To meet the expenses including BHEL overheads of 30% & Liquidated damage/penalties arising out of "Risk & Cost" as explained above under SI.No. 8.2.2. BHEL shall recover the amount from any money due from Contractor, from any money due to the Contractor including Security Deposit or by forfeiting any T&P or material of the contractor under this contract or any other contract of BHEL or by any other means or any combination thereof
- 8.2.4 To terminate the contract or to restrict the quantum of work and pay for the portion of work executed in case BHEL's contract with their customer are terminated for any reason, as per mutual agreement.
- 8.2.5 To effect recovery from any amounts due to the contractor under this or any other contract or in any other form, the moneys BHEL is statutorily forced to pay to anybody, due to contractor's failure to fulfill any of his obligations. BHEL shall levy overheads of 15% on all such payments.
- 8.2.6 While every endeavour will be made by BHEL to this end, they cannot guarantee uninterrupted work due to conditions beyond their control. The Contractor will not be normally entitled for any compensation/extra payment on this account unless otherwise specified elsewhere in the contract.
- 8.2.7 In case the execution of works comes to a complete halt or reaches a stage wherein worthwhile works cannot be executed and there is no possibility of commencement of work for a period of not less than two months, due to reasons not attributable to the contractor and other than Force Majeure conditions, BHEL may consider permitting the contractor to de mobilize forthwith and re mobilize at an agreed future date. Cost of such demobilization/remobilization shall be mutually agreed. ORC in such cases shall not be applicable for the period between the period of demobilization and re mobilisation. The duration of contract/time extension shall accordingly get modified suitably. In case of any conflict, BHEL decision in this regard shall be final and binding on the contractor.
- 8.2.8 In the unforeseen event of inordinate delay in receipt of materials, drawings, fronts, etc, due to which inordinate discontinuity of work is anticipated, BHEL at its discretion may consider contractor's request to short close the contract, provided that the balance works are minor vis a vis the scope of work envisaged as per the contract. At the point of requesting for short closure, contractor shall establish that he has completed all works possible of completion and he is not able to proceed with the balance works due to constraints beyond his control. In such a case, the estimated value of the unexecuted portion of work as mutually agreed, shall however be reduced from the final contract value. Final

Contract value for this purpose shall mean executed contract value plus value of unexecuted portion of work as per rate schedule.

8.3 ARBITRATION & RECONCILIATION:

8.3.1 In case amicable settlement is not reached in the event of any dispute or difference arising out of the execution of the Contract or the respective rights and liabilities of the parties or in relation to interpretation of any provision by the Contractor in any manner touching upon the Contract, such dispute or difference shall (except as to any matters, the decision of which is specifically provided for therein) be referred to the sole arbitration of the arbitrator appointed by BHEL/In charge(Region).

The award of the Arbitrator shall be binding upon the parties to the dispute

Subject as aforesaid, the provisions of Arbitration and Reconciliation Act 1996 (India) or statutory modifications or re enactments thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings under this clause. The venue of the arbitration shall be the place from which the contract is issued or such other place as the Arbitrator at his discretion may determine

The award of the Arbitrator shall be binding upon the parties to the dispute

8.3.2 The cost of arbitration shall be borne equally by the parties.

8.3.3 Work under the contract shall be continued during the arbitration proceedings

8.4 PAYMENTS:

Payments to Contractors are made in any one of the following forms

Running Account Bills (RA Bills)

- i) These are for interim payments when the contracts are in progress. The bills for such interim payments are to be prepared by Contractor in prescribed formats (RA Bill forms).
- ii) Payments shall be made according to the extent of work done as per measurements taken up to the end of the calendar month and in line with the terms of payments described in the Tender documents.
- iii) Recoveries on account of electricity, water, statutory deductions, etc are made as per terms of contract.

8.4.1 Final Bill:

Final Bill₆ is used for final payment on closing of Running Account for works or for single payment after completion of works. „Final Bill₆ shall be submitted as per prescribed format after completion of works as per scope and upon material reconciliation, along with the following.

- i) No Claim Certificate^e by contractor
- ii) Clearance certificates where ever applicable viz Clearance Certificates from Customer, Various Statutory Authorities like Labour department, PF Authorities, Commercial Tax Department, etc
- iii) Indemnity bond as per prescribed format BHEL shall settle the final bills after deducting all liabilities of Contractor to BHEL

8.5 CLOSING OF CONTRACTS:

Security Deposit shall be refunded/Bank Guarantee(s) released to the Contractor along with the 'Final Bill' after deducting all expenses / other amounts due to BHEL under the contract / other contracts entered into with them by BHEL.

8.6 LIQUIDATED DAMAGES (LD):

Liquidated Damage provision shall remain applicable for delay in Crane TRANSPORTATION to Site and shall be applicable and to claim compensation for losses sustained including BHEL's supervision charges and overheads in case of termination of contract and to levy liquidated damages for delay in completion of work, at the rate of 1/2% of the contract value per week of delay or part thereof subject to a ceiling **of 10% of the contract value**

ANNEXURE-I

CERTIFICATE OF DECLARATION FOR CONFIRMING THE KNOWLEDGE OF SITE CONDITIONS

We,.....
Hereby declare and confirm that we have visited the project sites under the subject namely,and acquired full knowledge and information about the site conditions, wage structure, Industrial climate and total work involved. We further confirm that the above information is true and correct and we will not raise any claim of any nature due to lack of knowledge of site condition.

Tenderers Name and Address

Place:

(Signature of the Tenderer's with stamp)

Date:

ANNEXURE-II

NON DISCLOSURE AGREEMENT

Memorandum of Understanding

BHEL PSNR is committed to Information Security Management System as per Information Security Policy.

M/s.....
providing.....service to BHEL PSNR, Noida hereby undertake to comply with the following in line with Information Security Policy of BHEL PSNR;

- To maintain confidentiality of documents & information which shall be used during the execution of the Contract.
- The documents & information shall not be revealed to or shared with third party which shall not be in the business interest of BHEL PSNR.

(M/s. BHEL, PSNR)

(M/s.....)

ANNEXURE-III

FORMAT FOR E-PAYMENT DETAILS : - BHEL-PSNR-NOIDA

(To be given in Company letterhead)

Beneficiary Name :

Bank Name & Branch :

M ICR Code (9 Digit) :

IFSC CODE
(VALID FOR NEFT) :

Beneficiary Account No. :

Beneficiary E-mail ID
(For payment confirmation) :

ANNEXURE - IV

FORMAT OF UNDERTAKING
(To be submitted in the bidder's letter head)

REF:

Dt.

**Bharat Heavy Electricals Limited
Power Sector – Northern Region,
Plot No. 25 , Sector - 16A ,
Distt. Gautam Budh Nagar,
NOIDA – 201 301(INDIA)**

Sub.: Tender for "Preparation of interactive erection E-manual (software based) of hydro TURBINE & ITS AUXILIARIES FOR 4x200 MW Parbati-II HEP."

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site as mentioned in NIT before submission of our offer and noted the job content & site conditions etc.

We also confirm that we have not changed / modified the tender documents as appeared in the website and in case of observance at any stage; it shall be treated as null and void. We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT and we hereby convey our unqualified acceptance to all terms and conditions as stipulated in the tender and NIT. In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer strictly in accordance with tender instructions.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized
representative of the bidder)

ANNEXURE - V

UNPRICED RATE SCHEDULE

Job: "Preparation of interactive erection E-manual (software based) of hydro turbine & its auxiliaries for 4X200 MW Parbati-II HEP."

SL NO.	DESCRIPTION	RATE (RS)	AMOUNT (RS)
1	TOTAL Lump sum price for Preparation of E-manuals i) For installation of Hydro Turbine, Hydro Generator, MIV, BFV and auxiliaries for Parbati Stg-II HEP and as per scope of work given in clause no. 1.0 of Tender Enquiry.	LS	

NOTES:

- 1.0 Rate quoted above shall remain firm throughout the contract period.
- 2.0 The rate shall be entered in figure as well as in words. In case of difference in rate between words and figures, the lesser of the two will be treated as valid rate.

DATE:

SIGNATURE:

PLACE:

NAME OF SIGNATORY:

NAME OF BIDDER:

(SEAL OF THE BIDDER)

ANNEXURE-A

Technical Specifications Hydro Turbine, Generator, MIV & BFV

General:

- (i) Introduction.
- (ii) Technical Parameters.
- (iii) Material Identification Code.
- (iv) Brief description of items.
- (v) Erection procedure of items including devices.
- (vi) Measurement and records.
- (vii) List of general log sheets.
- (viii) General special test including stress tightening.
- (ix) Assembly of equipments.
- (x) Erection flow charts with illustrations.
- (xi) Tools & Tackles.
- (xii) List of drawings.
- (xiii) General purpose Adhesives, lubricants, sealants used for assembly.
- (xiv) Electrodes Specifications.
- (xv) AVI by 2D to 3D modeling of the specified items only.

1. Turbine Main Assemblies & Equipments:

1. Earth mat.
2. First stage Embedded Parts and foundation.
 - i) Lower Pit Liner.
 - ii) First stage embedded pipelines.
3. Foundation Parts.
 - i) Arrangement of central frame work.
 - ii) Turbine Housing.
 - iii) Distributor Assembly (including Welding Sequence).
 - iv) NDT and hydraulic testing.
 - v) Second stage embedded pipelines.
4. Turbine Assembly.
 - i) Assembly of Nozzles.
 - ii) Assembly of deflectos & def. servomotors.
 - iii) Assembly of Brake jet valve.
 - iv) Assembly of De-compression valve.
5. Turbine Bearing Assembly.
6. Runner & Shaft Assembly.
7. Feedback Mechanism & Gov. Hydro Mech cabinet.

8. Standard Design Parts.
 - i) Bearing and Turbine Instrumentation.
9. Pipelines.
 - i) Oil, Air, Water pipelines.

2. (i) MAIN INLET VALVE (SPHERICAL VALVE) ARRGMT.

1. Spherical Valve (MIV) .
2. Inlet Pipe.
3. Outlet pipe & Dismantling joint.
4. Service and maintenance Seals.
5. Bypass valve.
6. MIV Oil Pressure Unit.
7. MIV Oil leakage Unit.
8. MIV Control cabinet.
9. Servomotors.
- 10.MIV Timing and Cushioning Adjustment.

(ii) BUTTER FLY VALVE ARRANGEMENT:

1. BF Valve.
2. Inlet Pipe.
3. Outlet pipe & Dismantling joint.
4. Service and maintenance Seals.
5. Bypass valve.
6. Air release valve.
7. Vacuum breaking valve.
8. BFV Oil Pressure Unit.
9. BFV Oil leakage Unit.
- 10.BFV Control cabinet.
- 11.Servomotors.
- 12.BFV Timing and Cushioning Adjustment.

3. STATION AND UNIT AUXILIARIES:

1. Drainage and Dewatering System.
2. HP compressed air system.
3. LP Air Compressor.
4. Cooling water System.
5. Turbine OPU.
6. Turbine Oil Leakage Unit.

4. List of Animation items (AVI)

1. Assembly of lower pit liner.
2. Assembly of central frame work
3. Assembly of turbine housing.
4. Assembly of Distributor.
5. Assembly of Nozzles.
6. Assembly of Deflector & Def. Servo Motor.
7. Turbine bearing assembly.
8. Runner & Shaft Assembly.
9. Emergency Closing Valve.
10. Idler & Safety Valve.
11. Functioning of Governor & Nozzle-deflector.
12. **MIV Assembly.**
13. By pass valve.
14. Maintenance & service Seal Operation.
15. **BFV Assembly.**
16. By pass valve.
17. Air Release valve.
18. Vacuum breaking valve.
19. Maintenance & service Seal Operation.

5. Generator Main Assemblies & Equipment:

General:-

- (i) Introduction.
- (ii) Technical specification.
- (iii) Brief description of assembly.
- (iv) Erection procedure of items.
- (v) Measurement and records.
- (vi) Assembly of equipment's.
- (vii) Erection flow charts with illustrations.
- (viii) H.V. Test.
- (ix) Alignment and centring

Generator:-

1. Stator & Air Coolers.
2. Rotor, Bottom shaft, Top shaft with thrust collar and Tubular shaft etc.
3. Lower Bracket with Guide Bearing
4. Upper bracket, Thrust cum Upper guide bearing assy.
5. Collector assy. & other assembly.
6. Generator top cover (Gen. flooring), radial jackets, Brush-gear casing etc.
7. Generator lower cover (pit air seal), barrel access door etc.
8. Pipe lines (oil, air & water)

9. Special instruments & wiring.

6. Auxiliaries

1. H.S. Lubrication system.
2. Brake Jack system.
3. Brake dust collector.
4. Power pack for rotor.
5. Carbon dust collector.
6. Anti-condensation generator space water.
7. Water Mist type/**CO2** fire extinguishing system.
8. Cooling water arrangement.

7. List of the Generator Animation items (AVI)

1. Stator Assembly.
2. Rotor Assembly.
3. Lower Bracket Assembly.
4. Lowering of Stator Assembly.
5. Lowering of Rotor Assembly.
6. Upper Bracket Assembly.
7. Top shaft assembly
8. Thrust bearing assembly.
9. Alignment & centring
10. Bearings Assembly.
11. Other fittings.