

BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM: HYDERABAD – 502032

M&S/10-REPAIR SHOP

Phone No.: 040--23185324

Fax No.: 040–23183285

email: mbchandana@bhel.in

Tender Notice No.: HY/M&S/10-RS/RC/19-20/PEAGARD/1110/1

Date: 11.10.2019

Tender in two parts (Techno-commercial & Price Bid) will be received by the undersigned in sealed cover from the contractors satisfying the prequalification requirements. The following should be legibly written on the cover -- Tender notice number, Tender date, Name of the work, Due date of opening, Techno-commercial bid or Price bid on top of the cover. Tenders will be opened at 14.30 Hrs on the due date in the presence of bidders or their authorized representatives in BHEL, Ramachandrapuram, Hyderabad.

1. Name of work : Reconditioning and Retrofitting of “HMT MAKE PEGARD H BORER MODEL AF 7 (ASSET NO: 03-0130)”, as per scope of Work, Terms & Conditions enclosed.
2. Earnest Money Deposit : **Rs. 36,064/-**
3. Estimated Cost to BHEL : **Rs. 18,03,200/-+ GST as applicable.**
4. Cost of tender documents (non-refundable) : NIL
5. Tender sale starts from : Not applicable
6. Tender sale closes on : Not applicable
7. Last date of receipt of tenders : 02.11.2019 up to 11.00 Hrs.
8. Date and time of opening of tenders: 02.11.2019 at 14.30 Hrs.
(Techno-commercial bid only)

Name & Address of the firm:

TENDERERS ARE REQUESTED TO SIGN AND PUT SEAL ON ALL PAGES OF TENDER DOCUMENT AND SUBMIT.

For BHARAT HEAVY ELECTRICAS LIMITED

-/
(CH MALLI BABU)
DGM / (M&S) 10- RS, AC

TENDERING PROCEDURE:

Tenders may be dropped in the Tender Box at Vendor Complex adjacent to Administrative Building of BHEL, Ramachandrapuram, Hyderabad – 502 032

The bids shall be submitted in two parts.

1. Techno commercial bid 2. Price bid

The envelope shall contain only the price bid to be quoted. Any other information in the price bid shall not be considered and the quotation is likely to be rejected. Price bid document shall be signed by the bidder at the bottom of the page. The envelope shall be sealed and super scribed “Price Bid ----- (Name of work)”.

The cover shall be super-scribed with “Quotation for ----- (Name of work)” and shall be addressed to Sri CH MALLI BABU, DGM(M&S) / 10-Repair Shop, Bharat Heavy Electricals Limited, Ramachandrapuram, Hyderabad – 502032 to reach at or before 11.00 hrs on the due date and it should also contain Bidder’s address, Tender No. and Due date.

BHEL is not responsible for any postal delay. The price bids will be opened in BHEL, Ramachandrapuram, Hyderabad-502032 on tender due date at 14.30 Hrs in the presence of those bidders who choose to be present.

EMD Payment:

An amount of **Rs. 36,064/- (Rupees Thirty Six Thousand and Sixty Four Only)** towards EMD shall be deposited in cash at BHEL Cash office or by way of Demand Draft / Bankers cheque drawn in the name of M/s. Bharat Heavy Electricals Limited payable at Hyderabad and shall be enclosed to the tender bid. No other means of payment will be accepted, no interest on EMD will be payable.

Cash office timings: 09.30 AM to 11.30 AM & 1.30 PM to 3.30 PM

BHARAT HEAVY ELECTRICAS LIMITED
RAMACHANDRAPURAM: HYDERABAD-502 032

M&S/10-REPAIR SHOP

TECHNO- COMMERCIAL BID

Tender Notice No.: HY/M&S/10-RS/RC/19-20/PEAGARD/1110/1

Date: 11.10.2019

NAME OF THE WORK: Reconditioning and Retrofitting of HMT MAKE PEGARD H BORER
MODEL AF 7 (ASSET NO: 03-0130), as per scope of Work, Terms &
Conditions enclosed.

**THIS IS AN INDIVISIBLE WORKS CONTRACT AND THE CONTRACTOR
SHALL FILL REMARKS COLUMN AGAINST ALL ITEMS.**

This tender schedule must be submitted along with the General Conditions, Special conditions etc. enclosed herewith duly signed and stamped on each page with bidder's covering letter. Quotations should be TYPED on tender schedules only. Any deviations / deletions should be brought out separately on bidder's letter pad and enclosed to the bid documents.

The following are to be filled up by the Bidder:

Name of the Contractor :
Full Address :
Name of the contact person :
Phone Number :
Fax Number :
E-mail Id. :
Mobile Number :

Sn.	Description	Contractor's Remarks
1	PF CODE NO	
2	ESI CODE NO	
3	PAN No.	
4	GST Registration No.	
5	Validity: 90 days from techno-commercial bid opening date.	
6	EMD : Rs.36,064/- , Cash receipt / bankers cheque details	
7	Security Deposit clause : acceptance (See terms and conditions for details)	
8	Taxes and duties : mention whether included and firm during contract period OR extra as applicable	
9	Payment Terms: Progressive payments as mentioned in the scope of work enclosed for the work completed successfully in all respects.	

Sl. No.	Pre-Qualification	Contractor Remarks
A1	<p><u>PRE-QUALIFICATION REQUIREMENTS (Proofs to be enclosed for verification):</u></p> <p>All the following conditions are to be satisfied by the bidder. Documentary proof is to be enclosed with techno-commercial bid satisfying all these conditions. In case the bidder fails to enclose the same the offer is liable to be rejected.</p>	
1	<p>The annual turnover during the last three years ending March 31st March 2019 should be at least 30% of the estimated cost (CA certified copy of balance sheet / P&L statements to be enclosed).</p>	
2	<p>The party must be a reputed machine tool builder / Reconditioning of Light machine tools / Medium machine tools. Copies of purchase orders/work orders and corresponding successful completion certificates should be submitted as proof for verification. Offers without these documents will be rejected. List of the customers along with respective contracting officers' addresses (including Phone no. / E-mail ID) for whom machines were reconditioned and retrofitted /manufactured / rebuilt should be enclosed to the offer.</p>	
3	<p>Experience of having successfully completed similar works during the last 7 years ending last day of month, previous to the one in which applications are invited should be either of the following:</p> <p>a) Three similar completed works costing not less than the amount equal to 40% of the Estimated cost.</p> <p style="text-align: center;">Or</p> <p>b) Two similar completed works costing not less than the amount equal to 50% of the Estimated cost.</p> <p style="text-align: center;">Or</p> <p>c) One similar completed work costing not less than the amount equal to 80% of the estimated cost.</p>	

4	<p><u>Similar Machines definition:</u></p> <p>Manufacture / Reconditioning of Medium size machine tools like</p> <ol style="list-style-type: none"> 1) Lathes equivalent to L-45 of HMT make (Job diameter 900 mm, Length 3 Meters, Weight 3 Tons.) 2) Horizontal Borers of Spindle Diameter 63 mm or Equivalent. 3) Vertical Borers equivalent to SK-12 of TOS, CSSR make (Table diameter 1200 mm). 4) Centre lathes equivalent to SU-63, Bed length 4.9 Meters of TOS make or Bigger 5) General purpose CNC machines like HMC/VMC/Horizontal Borer/Vertical Borer 6) Drilling machines of spindle dia. 60 mm to 100 mm 7) Manufacturing of light or medium machines equivalent to HMT make Radial drilling machines like RM-65 OR equivalent. 	
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MACHINE SPECIFICATIONS: HMT MAKE PEGARD H BORER MODEL AF 7 (ASSET NO: 03-0130)

Specifications of HMT, PEGARD AF7 H-BORING MACHINE

Year of manufacturing	1973
Vertical travel, (Y)	700 mm
Spindle stroke, (W)	700 mm
Table size	900 X 900 mm
Table travel, (X)	700mm
Table travel, (Z)	1000mm
Spindle diameter	75 mm
Weight of job	800 kg
Spindle attachment	MT-5
Spindle speeds RPM 2 RANGES-	18/28-1800
Feeding speeds mm/min	9/25-1000
Main motor Power	7.5 HP
Dimensions of the machine (L x W x H)	3800 x 2200 x 2900mm
Weight of the machine	6000 kg

Scope of Work in brief

Dismantling of the machine at BHEL works, transportation of the dismantled machine to contractor works, Reconditioning and Retrofitting of the machine, Painting, Prove-out of geometrical and job accuracies at Contractor works, dismantling into sub-assemblies, transporting to BHEL works, erection & commissioning, Prove-out of the machine (Geometrical accuracies) and handing over the proved out machine to Production at BHEL Works by the contractor.

Detailed Scope of Work

S No.	Description of Work / Activity
A	<u>MECHANICAL</u>
1	<p>Noting the condition of the machine with respect to the following.</p> <ul style="list-style-type: none"> - Measurement and recording of the geometrical accuracies as per manufacturer's charts - Measurement / observation of vibration / noise. <p>The above works are to be done at BHEL by the contractor with his personnel and measuring instruments.</p>
2	<p>Removing the machine from foundation at BHEL works, dismantling into transportable lots for further transportation to the contractor's works. The necessary personnel and tools are in the contractor's scope. Transportation and transit insurance both ways in BHEL scope and cost.</p>
3	<p>Unpacking the transported parts at contractor works, complete dismantling of the machine assemblies and table into individual parts, de-greasing, chemically cleaning; pre-painting of structural parts, joint inspection to finalize the detailed list of.</p> <ul style="list-style-type: none"> 1) Spares to be bought out. 2) Spares to be manufactured. <p>The list should be approved by BHEL. Drawings of spares to be manufactured and specifications for bought-out items shall be prepared and submitted to BHEL for approval.</p>
4	<p>Backlash observed in all the axes. Axes guide ways grinding, scraping and blue matching is to be done to obtain the required accuracies. Movement is very hard and vibrations observed in X axis. These problems are to be eliminated and accuracies of the machine to be improved.</p>
5	<p>Axes' locking is not working properly. This is to be rectified.</p>
6	<p>All the lead screws and box nuts are to be replaced.</p>
7	<p>One spare box nut for head stock up/down motion is to be supplied.</p>
8	<p>All the clutch plates and fingers are to be replaced with new ones. One set of spare clutch plates are to be provided.</p>
9	<p>Gear shifting for feed and speed is not working properly. This is to be rectified by replacing the required mechanisms.</p>
10	<p>All bevel gears of the table are to be supplied as spare.</p>
11	<p>Counter weight pulleys, shaft and chain to be replaced.</p>
12	<p>Vibrations are observed in spindle. This is to be rectified. Spindle bush bearings to be replaced.</p>
13	<p>All the bearings in the machine are to be replaced including spindle bearings (SKF / FAG / RHP / TIMKEN makes only)</p>

Reconditioning and Retrofitting of HMT MAKE PEGARD H BORER MODEL AF 7
(ASSET NO: 03-0130)

S No.	Description of Work / Activity
14	Bellow covers to be provided for Y axis above the head stock and rollaway covers to be provided below the head stock. Two sets of rollaway covers are to be provided as spare.
15	Rapid and feed levers along with slotted bracket are to be replaced.
16	Vipers of all the guide ways to be replaced.
17	Presently ALNICO braking system is there for the spindle braking. This system may be studied and replaced with a suitable alternative system. If suitable alternative system is unavailable the existing system is to be repaired for proper working of the spindle braking and one spare braking system is to be supplied.
18	All levers and handles shall be Nickel-plated.
19	Name plates, instruction plates shall be replaced with new ones. One plate with machine specifications in full, name & address of reconditioning party, year of reconditioning etc. should be riveted on top of the column surface.
20	<p>LUBRICATION :</p> <p>a. The lubrication system of the spindle head is to be retained. Lubrication pipes are to be replaced wherever necessary. Piston pump servicing is to be done.</p> <p>b. 'CENLUB' make lubrication system along with required accessories is to be provided for saddle and table.</p> <p>c. 'CENLUB' make lubrication system along with required accessories is to be provided for up / down movement of head stock.</p> <p>d. Servicing to be done for the existing lubrication system of gear box.</p>
21	<p>COOLANT SYSTEM:</p> <p>New coolant pump and motor of suitable capacity for a discharge of 10 liters/minute is to be provided. The tubing system, nozzle, and strainers are to be replaced. The coolant circulating path and collecting sump are to be checked for damages and rectified.</p> <p>Coolant tank is situated in the bed of the machine. The capacity of the coolant tank is 20 liters.</p>
22	Oiling points with periodicity, type of oil to be used shall be indicated on the machine.
23	Any modifications carried out shall not sacrifice original traverses, speed and feed ranges
24	<p><u>PAINTING :</u></p> <p>Machine and table outside body shall be painted with two coats of Apcolite (Asian paints) Premium enamel alpine green colour paint. Interior of the machine and table are to be painted with two coats of red enamel paint. Wherever oil comes in contact with interior of the body, oil resistant paint to be used. Letters, numerals etc. will have to be painted with a different colour as required / as indicated by BHEL at the time of final painting. For electrical panel boxes inside area is to be painted with two coats of white enamel paint. Painting should be carried out according to the standard procedure for painting including cleaning and removing old paint, applying metal primer putty etc. Good finish should be ensured. Overall Machine aesthetic view should be taken care of.</p>
B	<u>ELECTRICAL</u>
1	Machine operating panel along with switches to be replaced.
2	Machine lamp to be provided. Energy meter to be provided.
3	All the limit switches along with brackets are to be replaced.

Reconditioning and Retrofitting of HMT MAKE PEGARD H BORER MODEL AF 7 (ASSET NO: 03-0130)
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S No.	Description of Work / Activity
4	Main Motor servicing is to be done.
5	All other AC motors are to be serviced and IR values to be improved.
6	A new and completely wired electrical control panel with necessary switchgear is to be provided. Total wiring of the machine is to be replaced. Earthing to be complied as per IS for the complete machine. Make of LT switchgear: Siemens or equivalent reputed make. Make of Cables for Auxiliary motors & signal cables: LAPP
7	Cable drag chain to be provided.
8	Existing DRO to be retained.
C	PROVE OUT OF RECONDITIONED MACHINE AND ITS TABLE AT CONTRACTOR WORKS
1	This has to be carried out at Contractor Works as mentioned in Column 'F'.
2	Dismantling of the machine after satisfactory final inspection; minimum packing required. Transportation and transit insurance by BHEL.
D	RE-ERECTION & RE-COMMISSIONING AT BHEL WORKS a) The complete machine is to be re-assembled, re-erected and re-commissioned at BHEL works by the Contractor. b) The reconditioned machine and its table shall be proved out at BHEL Works as mentioned in Column 'F'
E	<u>SCOPE OF DOCUMENTATION</u>
1	Detailed Mechanical, Electrical and Lubrication drawings along with location of various components (lay out) – 3 copies
2	Catalogues of all bought-out items --- 3 copies
3	One set of above documentation in CD form
F	<u>PROVE OUT OF THE RECONDITIONED MACHINE</u>
1	Checking of geometric accuracies as per original test chart supplied by BHEL. These accuracies shall be brought back to 100% of the original accuracies mentioned in the original test chart.
2	Supplier has to prove out all original functions of the machine to the satisfaction of BHEL.
3	Two sample work pieces have to be machined to check the accuracy of the job from rebuilt machine. All these tests should be witnessed by BHEL representatives and certified.
G	DOCUMENTATION
1	Electrical drawings of the control panel, pendant station and Cabling drawings
2	Mechanical drawings of the replaced parts, modified parts and manufactured parts
H	GENERAL CONDITIONS
1	The machine is to be reconditioned at contractor works. Contractor personnel will be allowed to work inside BHEL premises only during checking of machine before taking for reconditioning, during re-commissioning and any maintenance work during the guarantee period.
2	Transport & transit insurance both ways in BHEL scope.
	All works connected to guideways of all axes (eg. Slideways, gibs), repair by machining

S No.	Description of Work / Activity
3	(grinding, milling, hand scraping), suiting with turcite material and matching are also covered under labour charges. However, bought-out items like turcite etc. are covered under spares.
4	<p><u>SPARES</u></p> <p>a) The spare parts (electrical / mechanical) required to be replaced (manufacturing spares and bought-out spares) will be to BHEL account. Contractor has to quote for these spares along with manufacturing drawings for manufacturing items and specifications for bought-out items for approval. BHEL will supply spares available with them. BHEL may procure and supply these items to the contractor from any other sources as well. Spares not supplied by BHEL shall be purchased / manufactured by the contractor.</p> <p>b) Spares required to be replaced other than those agreed to during joint inspection will have to be approved by BHEL before such replacement is affected. Cost of such spares shall be absorbed by the contractor. BHEL will not pay for these items.</p> <p>c) Prior intimation has to be given to BHEL by the contractor for deputing the team for joint inspection at contractor works.</p> <p>d) Contractor must submit the quotation for joint inspection spares within a week of joint inspection</p>
5	<p><u>REWORKS IN LIEU OF REPLACEMENT</u></p> <p>Reworks in lieu of replacement on all parts (guideways / sliding surfaces like spindle, bushes, box nuts, screw rods etc.) by machine grinding preferably/chrome plating / welding / machining etc. identified initially and also during joint inspection are covered under labour charges only. For such works BHEL will not pay extra.</p> <p>Repair of spindle (if required) by machining, chrome plating etc. are also covered under labour only.</p>
I	SPECIAL CONDITIONS
1	<p>BANK GUARANTEE / ALL RISK INSURANCE COVERAGE AS SECURITY DEPOSIT (for safe custody of machines and material):</p> <p>The contractor has to submit Bank Guarantee / All risk insurance coverage for Rs.20 lakhs for safe custody and as security deposit for the period of machine and materials being stationed at contractor works. This bank guarantee will be released after receipt of reconditioned and tested machines at BHEL works. Any damage / loss shall be made good by contractor at their cost.</p>
2	<p>EMD of 2% of the estimated value (i.e.Rs.36,064/-) shall be deposited to BHEL account by the bidder along with the offer. In the event of acceptance of tender, and if the contractor/bidder fails to commence the work within promised period, BHEL shall without prejudice to any other right or remedy be at liberty to forfeit the said earnest money absolutely. EMD does not carry any interest. Offers without EMD will be rejected and will not be considered for evaluation.</p>
3	<p><u>SECURITY DEPOSIT FOR WORK</u></p> <p>The total amount of Security Deposit will be 5% of the contract value. EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit. This is as per clause 5.2.1 of BHEL Works policy and reproduced in terms & conditions. This amount shall be returned after successful completion of the contract work.</p>
	<u>TIME SCHEDULE</u>

S No.	Description of Work / Activity
4	Twenty weeks for reconditioning from the date of receipt of the machine at contractor works to the date of inspection and acceptance of reconditioned machine at contractor works.
5	<p><u>PAYMENT TERMS</u></p> <ol style="list-style-type: none"> 1. 30% of Part-A order (i.e. 30% of labour cost and 30% of initial spares cost) shall be paid after joint inspection of fully dismantled machine for 1) identification of spares and 2) deciding detailed scope of repair / rework on various components / parts and submission of quotation for joint inspection spares along with manufacturing drawings . This is subject to submission of Bank guarantee for like amount valid for the period till the reconditioned machine is handed over to Production at BHEL works. 2. 60% of labour cost and 60% of initial spares cost (both Part-A and Part-B together) along with 100% taxes and duties at actuals (against submission of documents to BHEL for reimbursement of the same from authorities concerned) shall be paid after prove out and handing over the reconditioned machine to Production at BHEL works. 3. Joint inspection spares shall be ordered separately (Part-B). However, 90% of Part B order shall be paid after prove-out and handing over the reconditioned machine at BHEL works 4. Balance 10% of Part-A & B orders shall be paid after submission of Performance Bank Guarantee of like amount valid for the guarantee period of 12 months (two-shift basis).
6	<p><u>PENALTY</u></p> <p>0.5% of the total contract value (including labor cost, cost of initial & joint inspection spares) per week or part thereof up to a maximum of 10% of the total contract value shall be levied beyond the time specified in IV.</p>
7	<p><u>PERFORMANCE BANK GUARANTEE</u></p> <ol style="list-style-type: none"> a) Satisfactory performance of the reconditioned machine shall be guaranteed for a period of 12 months (on two shift basis) from the date of handing over the machine to production at BHEL works. b) During the guarantee period contractor shall attend to the machine / replace failed parts free of charge as and when called upon to do so for defects / failures noticed and attributable to contractor's work & supplies (both manufactured and bought-out by them) c) The discarded parts (old) during the guarantee period shall be taken back by contractor at its expenses. Repairs, if any, shall be carried out either at BHEL / contractor works as agreed mutually but cost of transportation both ways shall be on contractor's account. BHEL will not pay for this.
8	<p>General tools / instruments / gauges required for</p> <ol style="list-style-type: none"> a) Checking and packing of the machine at BHEL works for transporting the same to contractor works for reconditioning. b) Re-commissioning and prove-out of the reconditioned machine at BHEL works shall be arranged for by the contractor. Special tools / instruments / gauges for these works will be provided by BHEL. <p>All these instruments / gauges should have valid calibration certificates from recognised agencies.</p>
9	BHEL reserves the right to inspect the progress as well as workmanship at any stage of the work. Decision of BHEL Representative shall be final in the matter of inspection at any stage. Contractor shall extend necessary co-operation to enable such inspection
10	All discarded parts shall be returned to BHEL

Reconditioning and Retrofitting of HMT MAKE PEGARD H BORER MODEL AF 7 (ASSET NO: 03-0130)
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S No.	Description of Work / Activity
11	MACHINE will be kept in open condition. No air conditioner is provided for this machine. The machine shall be given specified accuracies in these conditions only.
12	General terms and conditions of BHEL as per enclosure shall be acceptable.
13	Any other activity (electrical and mechanical) not mentioned in this scope of work to bring back the machine to satisfactory working condition with all features and accuracies after reconditioning is in the scope of the contractor
14	The contractor is required to study the machine and the scope of work and satisfy himself about completeness of the scope in order to submit his offer. In case of any discrepancies in the scope of work or material supply the contractor is required to highlight the same to BHEL in his offer
15	The contractor may visit our works to see the machine, which is presently in working condition.
16	Lodging & Boarding facilities for the contractor personnel are at Contractor's scope (during dismantling period, re-erection & re-commissioning period and for troubleshooting during performance guarantee period). BHEL is not responsible for this.
17	Material handling facilities such as crane, battery truck, slings, lifting tackles etc. along with operator, consumables like cleaning solvents, cotton waste etc. and utilities like electric power, compressed air etc. shall be provided by BHEL for the works performed at BHEL works
18	The enclosed National Electronic Funds Transfer Format should be submitted along with offer for payments (CVC Guidelines).

Reconditioning and Retrofitting of HMT MAKE PEGARD H BORER MODEL AF 7
(ASSET NO: 03-0130)

PRICE ESTIMATION FOR RECONDITIONING AND RETROFITTING OF HMT MAKE PEGARD HORIZONTAL BORER MODEL AF 7 (ASSET NO: 03-0130)

S No.	Description of activity / material	BHEL Estimate in Rs.
A	Labour	
A.1	Labor charges to include complete scope of work including Engineering and Design charges, dismantling at BHEL works.	6,09,600
B. Material		
B1	Initial spares	
B1.1	Mechanical	
B1.1.1	Replacement of all Bearings. Make SKF/FAG/RHP/TIMKEN make.	4,60,000
B1.1.2	Lead Screws and Box nuts for headstock up/down motion and Saddle. One spare box nut for head stock up/down motion is to be supplied.	74,880
B1.1.3	Bellow covers and rollaway covers for head stock up/down motion. Two sets of rollaway covers are to be provided as spare.	64,800
B1.1.4	Centralized lubrication system for head stock up/down motion, Saddle and Table.	37,920
B1.1.5	Lubrication system for Spindle and gear box.	28,800
B1.1.6	Clutch plates and fingers. One set of spare clutch plates are to be provided.	36,000
B1.1.7	Bevel gears for table motion.	43,200
B1.1.8	Counter weight pulleys, shaft and chain.	27,360
B1.1.9	ALNICO braking system for spindle. Rapid and feed levers along with slotted bracket are to be replaced	48,000
B1.2.0	Rapid and Feed levers with slotted brackets and vipers for guide ways.	37,920
B1.2.1	Coolant pump and motor, tubing, nozzles and strainers. Vipers of all the guide ways to be replaced	46,080
B1.2.2	Painting as mentioned in scope of work.	52,000
	Total B1.1	9,56,960
B1.2	Electrical	
B1.2.1	Machine operating panel along with switches	43,200
B1.2.2	Machine lamp unit (MH Lamp) of suitable power	19,200
B1.2.3	All limit switches along with brackets	24,000
B1.2.4	Fully wired Electrical control panel	1,13,280
B1.2.5	Cable drag chains	36,960
	Total B1.2	2,36,640
C	Total material cost B (B1.1 + B1.2)	11,93,600
D	Grand Total D = A+ B	18,03,200
E	GST @ 18 % on D	3,24,576

Reconditioning and Retrofitting of HMT MAKE PEGARD H BORER MODEL AF 7 (ASSET NO: 03-0130)
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S No.	Description of activity / material	BHEL Estimate in Rs.
F	Grand Total including GST i.e. (D+E)	21,27,776
G	Cost to BHEL i.e. (F-E)	18,03,200

1. Tenderer required to quote their percentage of less/excess/at par in figures and Words over the Estimate as stated above.
2. Tenderer is not allowed to change the estimate. Alteration of estimate by tenderer leads to rejection of his bid.
3. The below offered percentage by the tenderer is proportionately applicable for all item rates.

Tender %	In Words	Figures
Excess		
Less		
Estimate		

Note:

1. In case of mismatch of words and figures, lower of the two will be taken.
2. GST @ 18% Extra on total order value.
3. Kindly note vendor has to bear the excess in taxes and duties in case of delayed delivery schedule.

NATIONAL ELECTRONIC FUND TRANSFER FORMAT

(To be furnished on Contractor's Letter head)

Ref. No.:

Date:

Dy. Manager/Finance-CM
Bharat Heavy Electricals Limited
Ramachandrapuram
Hyderabad 502 032

Dear Sir,

Sub: Details for National Electronic Fund Transfer

We request and authorize you to effect payment through NEFT to our Bank account, subject to RBI Guidelines, as per the details given below.

- A. Supplier code (As per PO/SCO) :
- B. Beneficiary (Name as per PO/SCO) :
- C. PAN of Beneficiary :
- D. TIN of Beneficiary :
- E. e-mail address of Beneficiary :
- F. City (of Beneficiary) :
- G. Bank Name :
- H. Branch (of Bank) :
- I. A/c Number :
- J. A/c Type (Savings or Current) :
- K. MICR Code of the branch (9 digit) :
- L. IFSC for EFT (11 char) :
- M. IFSC for RTGS (if different from L) :
- Thanking you,

(Signature with Seal)
Authorized Signatory
Name :
Designation :

Certified that the particulars furnished above are correct as per our records.

Date:

(Signature of authorized official of bank)
Bank Stamp

BHEL TERMS AND CONDITIONS

A. CONTRACTUAL:

- 1) The Contractor will ensure that the employees deployed by him in the premises of BHEL are physically and mentally fit and do not have any criminal record.
- 2) The Contractor will maintain records of his employees deployed to carry out the job. The Contractor will provide employment card/Identity card with photograph duly attested by him to his employees.
- 3) In the event of termination of contract for any reason whatsoever, the contractor shall withdraw all his employees from the establishment of BHEL.
- 4) The Contractor will obtain insurance cover for his employees and take third party risk insurance coverage at his own cost.
- 5) The Contractor will be solely entitled to dictate such workers about the manner of carrying out the work.
- 6) The Contractor or his authorized representative will supervise the work allotted to him and being carried out by his employees or will post a Supervisor for this purpose.
- 7) The Contractor will be responsible for the good conduct of his employees. In case of any misconduct / misbehavior by any employee, contractor will replace such employee immediately.
- 8) The Contractor will keep watch on his employees and he will be liable for any pilferage / loss to BHEL due to acts of omission and commission by his employees. Similarly, liability for any compensation to outsiders on account of any act of omission and commission by the employees deployed by the contractor shall lie exclusively with him.
- 9) The Contractor will ensure that all precautions are taken for the safety of his employees.
- 10) The Contractor will provide to his employees all tools, tackles and equipments required to carry out the job under the contract at his own cost.
- 11) The Contractor will provide safety appliances at his own cost which may be required under the statute or otherwise.
- 12) The Contractor will provide all material at his own cost as mentioned in the contract to his employees for carrying out the job.
- 13) Transportation facility for the employees to come to BHEL works is in the scope of the contractor.
- 14) Consumables like air, water, power supply will be supplied by BHEL free of cost.
- 15) No accommodation will be provided by BHEL to the contractor personnel deputed for performing the contract work.
- 16) Shift timings: 1st shift – 06:45 to 15:15 hrs with lunch break from 11:30 to 12:00 hrs
2nd shift—15:00 to 23:30 hrs with dinner break from 19:30 to 20:00 hrs

B. STATUTORY:

- 1) The Contractor shall comply with all statutory requirements, rules, regulations, and notifications in relation to employment of his employees issued from time to time by the concerned authorities.
- 2) The Contractor shall provide PF passbook to his employees and ensure payment of PF, EDLI, and pension dues under EPF & MP Act, 1952 to the RPFC.
- 3) The Contractor shall produce proof of deductions as well as remittances of PF, EDLI, Pension, ESI contribution, administrative charges etc. wherever applicable and shall maintain proper records.
- 4) The Contractor shall furnish proper returns to the concerned statutory authorities.
- 5) The Contractor shall be solely responsible for nonpayment/delayed payment of wages, contributions under EPF & MP Act, ESI Act etc.
- 6) In case the contractor fails to make payment of wages to his employees or remittance of contribution to the concerned authorities, the security deposit/other dues under the contract can be utilized by BHEL to discharge the liability of the contractor.
- 7) The Contractor shall indemnify BHEL against all claims and losses under various statutes or any civil or criminal law in connection with employees deployed by him.

- 8) The liability for any compensation on account of injury sustained by an employee of the contractor will be exclusively that of the contractor.
- 9) The Contractor shall obtain license under CL(R&A) Act, 1970.

C. GENERAL:

- 1) The contractor shall pay minimum wages to workers as per minimum wages act. Contractor shall make PF, ESI contributions as per applicable rules. ESI Cards should be arranged to contract labour and their wards by the contractor. These records need to be preserved for a period of at least 3 years and made available even after the contract is over for any verification by the statutory authorities.
- 2) Contractor shall provide personnel protective equipment like safety uniform in blue color, safety shoe in black colour and should ensure that they wear them daily while on work.
- 3) Contract operates on Unit rates, contract labour should get at least Daily Unit rate as per the minimum wages act from the contractor.
- 4) Contractor should pay double amount to the contract labour, if they are engaged more than 8 hours (normal).
- 5) Permissions for labour and materials shall be obtained in the prescribed formats.
- 6) **Break:** contract labour should be given break period for about 15 days once in every 6 months in case of long duration contracts, for one time/ short period contracts this clause will not apply
- 7) The contractor is wholly responsible for any loss of life or partial disability of any of their labour while on duty
- 8) In case of occurrence of any accident/ injury of contractor's staff, BHEL will not pay any compensation while they are on duty and contractor has to take care of health of workers under statutory obligation.
- 9) BHEL reserve the right to cancel the work order in part or in full without assigning any reason.
- 10) Upon awardal of the work, the contractor has to execute an agreement with BHEL on a non-judicial stamp paper worth Rs.200/- as per General Agreement Conditions before commencement of work.
- 11) BHEL shall have the privities of the contract with the contractor only and will give instructions to the contractor or his authorized representative. BHEL will have nothing to do or be concerned with the employment of employees working for the contractor. The relationship between BHEL and the Contractor will be that of independent entities and nothing herein contained will amount to joint venture, partnership or an employer-employee relationship.
- 12) The contractor shall maintain regular contact with the designated employee(s) of BHEL and will interact on matters relating to the work awarded under this contract.
- 13) In case the Contractor does not carry out the Contractual/Statutory obligations or the services rendered by him are found to be unsatisfactory, BHEL shall bring the same to his notice and he will be obliged to discharge the obligations and rectify the efficiency/anomaly within three days time failing which, BHEL reserves the right to terminate the contract without assigning any reason whatsoever. In such an event, no damages will be payable for short closure of the contract.
- 14) Notwithstanding anything contained in the contract Agreement which will be entered after awardal of work, the contract may be terminated by BHEL without assigning any reason thereof by giving a notice of 30 days to the contractor.
- 15) The Entry permits are to be issued to the Contract Labour by Assistant Commandant / CISF (Plant), based on the requisition submitted by Contract Executing Officer and forwarded by Dy. General Manager / Personnel.
- 16) Every contractor shall submit a notice regarding commencement and completion of work in form – VI A&B [Rule 25 (VIII) & 81 (3)] to HR Department, IR section through his contract executing officer, for forwarding the same to State Labour Department.
- 17) Non – compliance of any provisions under the act / rule / instructions / guidelines shall make the contractor liable for penal action including termination of contract.
- 18) Contractor shall furnish in a separate letter his place of residence and postal address. The delivery at the above named place or posting in a Post box regularly maintained by the post and telegraph department or sending letters registered for acknowledgement of any notice, letter or other communication to the contractor. Change in address shall come into force at any time by an instrument executed by the contractor and delivered to the Company official who has signed the contract.
- 19) The contractor must satisfy himself by personal study and examination of the drawings / specifications furnished and understands thoroughly the scope of proposed work in detail and all conditions affecting the work before entering into the contract. There shall not be at any time dispute / complaint of any misunderstanding with regard to scope of work and interpretation of specifications or any misunderstanding with regard to nature or omission of the work to be done not shall any application for compensation in terms of time and money shall be accepted by company regarding the above.
- 20) Contractor shall in his absence keep competent agent constantly on the works and any directions or explanations given by the “Contract Signing Officer” or his representative to such agent shall be held to have been given to the contractor himself.

- 21) It shall be contractor's sole responsibility to protect the public and his employees against accident from any cause and provide required safety equipments and shall indemnify, the company against any claims for damages for injury to the person or property resulting from any such accidents and shall, where the provisions of the workmen's compensation act apply, take steps to properly insure against any claims there under.
- 22) In the event of any accident in respect of which compensation may become payable under the workmen's compensation act VIII of 1923 whether by the contractor or by the company as principle employer, it shall be lawful for the company to retain out of monies due and payable to the contractor such sum or sums of money as may, in the opinion of the company shall be final in regard to all matter arising in this clause.
- 23) No work shall be done on Sundays or on other declared holidays of the company without the written permission of the company officer in-charge of the work. The contractor shall comply with the provisions of the Factories Act Rules framed there under if the same are applicable.
- 24) The contractor shall keep his work place clean and safe to avoid injuries to men and damage to finished products / equipments.
- 25) On the occurrence of an accident, which results in the death of any of the workmen employed by the contractor or which is so serious as to be likely to result in the death of any such workmen, the contractor shall intimate within 24 hours of the happening of such an accident intimate in writing to the company official in-charge of the work.
- 26) The contractor shall indemnify the company against all losses or damages sustained by the company resulting directly or indirectly from his failure to give intimation in the manner aforesaid including the penalties or dues if any and become payable by the company, as a consequence of failure, the company to give notice under the workmen's compensation act or otherwise confirm to the provisions of the said act in regard to such accident.
- 27) The contractor shall ensure adherence to all statutory requirements applicable to BHARAT HEAVY ELECTRICALS LIMITED, RAMACHANDRAPURAM, HYDERABAD-502032.
- 28) Notwithstanding the clause, in case of any financial loss incurred by the company on account of contravention of the Provident Fund regulations or any regulations of rule touching the same by the contractor, the contractor shall submit an undertaking to indemnify the company to the extent of the loss incurred by the company.
- 29) The contractor should engage only those labourers who shall be more than 18 (eighteen) years of age.
- 30) The contractor shall not resort to subcontracting under any circumstances. If found subcontracting at a later date, BHEL reserves the right to take whatever action it deems fit, including cancellation of the contract.
- 31) The contractor shall be responsible to settle any grievances of the labour deployed by him.
- 32) Whenever the term "CONTRACTOR" is used, it shall be understood to refer to the particular person, firm or corporation with whom an agreement has been made by the concerned company official for executing the work defined in the concerned agreement and for the purpose of instructions regarding compliance with contract conditions, it shall include the contractor's authorized agents, who are entrusted with the work by contractor.
- 33) The quantities mentioned in the agreement schedule are worked out from the relevant drawings in the company and may not be the actuals required for execution. The company does not expressly or by implication agree that the actual amount of the work to be done shall correspond therewith, but reserves the right to increase or decrease the quantity of any class or portion of the work as he deems necessary.
- 34) All the works shall be carried out in accordance with the directions and to the satisfaction of the company official in accordance with the drawings, specifications and instructions. Supplementing or explaining the same as may from time to time shall be done by the company official.
- 35) For all modifications, omissions or additions to the approved drawings and specifications, the company shall issue revised plans or written instructions and no modifications, omission or addition shall be made unless at any time before completion of the work.
- 36) All materials, articles, and workmanship shall be the best of their respective kinds for the class of work described in the contract specifications and schedule and materials to be obtained by the contractor shall be from sources approved by the company.
- 37) Sample of materials shall be furnished by the contractor at his expense to the company when called for before execution of any work.
- 38) The company shall have power to reject at any stage, any work which is considered to be defective in quality of materials of workmanship and shall not be debarred from rejecting wrong material by reasons of having previously passed them in an unworked condition. Any portion of the work or materials rejected or pronounced to be inferior or not in accordance with specifications shall be taken down and removed from the work site at the contractor's expenses.
- 39) The decision of the company shall be final and binding on the contractor on all technical questions which may arise in the contract with respect to material, workmanship, removal; of improper work, interpretation of the working drawings, specifications, notes, procedures etc.
- 40) The decision of the "Contract Signing Officer" or any officer deputed by him duly authorized on his behalf, in respect of the rate of progress and the quality of work or material shall be final.

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- 41) Contracts shall be deemed to have included in his tender price of all the plant, machinery and appliances required for the purpose of all operations connected to secure a satisfactory quality of work within the opinion of the company will ensure the completion of the work within the time specified.
- 42) It is open to the company to lend or supply to the contractor any tools, implement, material and machinery that are needed by the contractor, which in the opinion of the company is essential to improve the quality or progress of work. The contractor shall pay such deposit or charges that may be fixed or determined by the company for any such articles or machinery lent or hired to the contractor.
- 43) All rubbish as it accumulates shall be removed from the site to the point of disposal as indicated from time to time by the company. If this is not adhered to, the company shall remove the scrap and recover the cost of these operations from the bills of the contractor.
- 44) Any sum due from the contractor on account of tools and plants, stores, or any other items provided by the company shall be deducted from the respective bill due to him.
- 45) In case the contractor does not execute the work awarded to him as per the terms and conditions of the agreement, the same shall be got executed by some other contractor and the excess cost incurred shall be recovered from the contractor's security deposit/pending bills.
- 46) In case of breach of any of the terms and conditions of the contract, a claim shall be lodged under the bank guarantee with the guarantor at the discretion of the competent authority of the company. On successful completion of the contract to the satisfaction of the company, the bank guarantee shall be released after due claim period.
- 47) In the event of any question or dispute or under this contract, the same shall be referred to a competent Authority in the company for sole arbitration and his decision shall be final and binding on the parties to the contract.
- 48) In case of any suit or other legal proceeding arising under this contract, the courts at Sangareddy (Medak Dist.) A.P only shall have the Jurisdiction.
- 49) Disputes, grievances between the contractor and his labour, will have to be settled by the contractor only.
- 50) The labour employed by the contractor, if found in abetting and fellow labour or contractors or any BHEL employee, the same shall be considered as an act of indiscipline. Such labourers shall be removed from the services of the contractor, on the advice of BHEL. Further the contractor shall initiate every necessary action in accordance with the relevant Laws, Rules & Regulations and enactments of State and Central Government.
- 51) Wherever, BHEL/COMPANY standards are mentioned shall be strictly followed.
- 52) Nothing contained in the contract agreement and its conditions shall be deemed to preclude or render inoperative the service of any notice, letter or other communication upon the contractor personally.
- 53) The decision of the "Contracting Signing Officer" shall be final and binding on the contractor on all technical questions which may arise touching the contract with respect to the quality of material, workmanship, removal of improper work, interpretation of the working drawings, specifications, notes, procedures etc.
- 54) All disputes, claims and demands arising in connection with the contract shall be settled by mutual consultation. If no such agreement is reached between the parties each party can appoint one Arbitrator and the Arbitrators so appointed can appoint a Presiding Arbitrator. The proceedings of the tribunal shall be in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the rules made there under. The venue of the Arbitration shall be at BHEL, Hyderabad or at such place as the Arbitrators may direct. The Award to be given by the Arbitral Tribunal shall be a speaking award. The arbitration costs, fees and expenses shall be borne by both the parties equally. The award of the tribunal shall be final and binding on both the parties equally. All questions, disputes, differences arising under, out of or in connection with this contract shall be exclusive jurisdiction of the Courts at Sangareddy, Sangareddy District, Telangana State.

D. GENERAL INSTRUCTIONS REGARDING BHEL TENDERING PROCESS:

1. If the tender is made by an individual, it shall be signed with his full name and his address shall be furnished. If it is made by firm, it shall be signed with the co-partnership name by a member of the firm, who shall also sign his own name, also furnish the name and address of each member of the firm. If the tender is made by a corporation, it shall be signed by a duly authorized Officer who shall produce with the tender, satisfactory evidence of his authorization. Such tendering corporation/firm is required to furnish evidence of its existence along with bid.
2. The EMD will be refunded to the unsuccessful Tenderers after rejection of the tender is intimated. The earnest money will be retained in the case of the successful tenderers and either of the cases will not carry any interest. It will be dealt with as provided in the conditions attached to the tender.
3. Whenever a tender is to be accepted, the tenderer, whose tender is under consideration, shall attend the Office of " Officer Inviting the Tender " on the date fixed by written intimation to him. He shall forthwith, upon intimation being given to him by the " Officer Inviting the Tender" for acceptance of his tender, complete the execution of

the agreement by signing all documents connected therewith. Failure to do so and not to commence the work within one month from the date of intimation shall entail forfeiture of the earnest money.

4. Tenderers shall pursue carefully the instructions and directions to the parties given in the tender document and the conditions thereof and all other relevant documents before quoting the rates for the work. The approximate quantity of work to be executed under each class is given in the schedule. The quantities are given with a view to enable tenderer to quote his overall rate for each class of work in the tender form and for a uniform comparison of tenders. It shall be definitely understood that the schedule is liable to alterations at the discretion of accepting authority.
5. Tenderers shall keep the offer valid for a period of 90 days from the date of opening of tender. After submitting the tender, he will not recall his offer or modify the terms and conditions thereof. Should the tenderer fail to observe or comply with the foregoing stipulations, the EMD shall be forfeited.
6. Tenderers have to quote their rates in the tender schedule legibly written in figures and words and those not submitted in proper form are liable for rejection.
7. The submission of tender shall be strictly in accordance with the terms and conditions stipulated in this tender notice. No counter conditions will be acceptable or valid.
8. Contractor shall be deemed to have included in his tender price of all the plant, machinery and appliances required for the purpose of all operations connected with the work embraced under the contract to secure a satisfactory quality of work and rate of progress which in the opinion of the " Contract Signing Officer" will ensure the completion of the work within the time specified.
9. The rates quoted by the contractor should be firm for the contract period. There shall be no revision in contract rates during the period of the contract. Any increase of statutory levies during the period of the contract will be reimbursed on production of relevant proof of incurring expenditure for the same.
10. **BHEL reserves the right to negotiate for price reduction with lowest quoted (L1) party and negotiated price will be considered as contract amount for all practical purposes.**
11. The contractor must have phone facility at his office/ residence or cellular phone for proper communication.
12. Withdrawal from contract during contract period in BHEL will entail forfeiture of security deposit.
13. The contractor should abide by the company's **CISF** Security / safety rules and provide such safety requirements as per statutory rules and requirements of the factories act.
14. In case of breach of any of the terms and conditions of the contractor, BHEL reserves the right to cancel the contract either in part or full.
15. Contractor shall provide uniform, shoes and other Personal Protective Equipments (like safety helmet) wherever applicable to their labour.
16. **Earnest Money Deposit:** Earnest Money is to be paid by each tenderer to ensure that the tenderer does not refuse to execute the work after it is awarded to him. The rate of earnest money deposit shall be as per tender schedule. EMD by the Tenderer will be forfeited as per Tender Documents if:
 - i). After opening the tender, the tenderer revokes his tender within the validity period or increases his earlier quoted rates.
 - ii). The tenderer 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.
 - iii). EMD shall not carry any interest
17. **Security deposit:** (Clause 8.2 of BHEL Works Policy)

The total amount of security deposit will be 5% of the contract value.
This is as per clause 5.2.1 of BHEL Works policy and security deposit shall be released to the contractor upon Fulfilment of contractual obligations as per terms of contract.
The security deposit shall not carry any interest.

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

8.2.2 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 favor 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 favor 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 should have the approval of **BHEL**.
- 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 collected before start of the work and the balance 50% may be recovered from the running bills.

(Note: In case of small value contracts not exceeding Rs.10 lakhs and all SAS jobs, work can be started before Security Deposit is collected. However, payment can be released only after collection / recovery of initial 50% Security Deposit)

- a. EMD of the successful tenderer can be converted and adjusted against the security deposit.
- b. The security deposit shall not carry any interest.

(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.

8.2.3 Security deposit shall not be refunded to the contractor except in accordance with the terms of the contract.

Signature of the Bidder with seal