

BHEL/ PSSR/PUR/EC-110008

dt 28 04 2010

**TENDER ENQUIRY**

FOR

**SUPPLY OF 1 NUMBER 500MT PORTAL GANTRY CRANE**  
**FOR ERECTING 500 MW to 800MW GENERATOR STATOR**  
**AS PER TENDER & TECHNICAL SPECIFICATION**

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### **1. NOTICE INVITING TENDER**

**BHEL Power Sector, Southern Region invites bids for the following item required at BHEL sites in India.**

	Description	
<b>Enquiry No &amp; Date</b>  EC 110008 /  28 04 2010	<b>SUPPLY OF 1 NUMBER 500MT PORTAL GANTRY CRANE FOR ERECTING 500 MW to 800MW GENERATOR STATOR AS PER TENDER &amp; TECHNICAL SPECIFICATION</b>	<b>Last Date of Tender Submission &amp; opening</b>  <u><b>20/05/ 2010</b></u> <u><b>15.30 Hrs (IST)</b></u>

#### **NECESSARY QUALIFYING REQUIREMENTS / PAST EXPERIENCE OF BIDDERS:-**

- (i) BIDDER SHOULD HAVE BEEN MANUFACTURING AND SUPPLYING PORTAL GANTRY CRANES OF 400MT 'OR' HIGHER CAPACITY FOR ATLEAST LAST THREE YEARS.
- (ii) BIDDER SHOULD HAVE SUPPLIED MINIMUM TWO UNITS OF 400MT 'OR' HIGHER CAPACITY OF SAME PORTAL GANTRY CRANES AND THAT SHOULD HAVE BEEN IN OPERATION ANY WHERE IN THE WORLD.
- (iii) THE OFFERED CRANE MODEL SHOULD BE FROM CURRENT MANUFACTURING RANGE.

#### **NOTES:**

1. The bidder shall either be Manufacturer of the offered crane or their Authorized Indian agent. In case the bidder is an authorized dealer, they shall submit authorization of the manufacturer along with the technical bid. Dealer- Manufacturer linkage shall be submitted along with the technical bids, incase, offer is submitted by the dealer / agent. In the absence such linkage, bidder's offer is liable to be rejected.
2. The bidders shall enclose details/documents in support of "Experience" given above . For each qualifying Requirement given above, the bidder shall submit the documents Specifically in line with qualifying requirements, such as copies of Relevant Purchase orders, contact details of clients with address and Phone numbers, Certificates related to supply and operation of cranes etc as applicable along with technical bid.
3. You have to deposit **Rs 2,00,000.00** (Two lakhs only) or 5000 USD (US Dollars Five thousand three hundred only ) or equivalent amount towards Earnest Money Deposit (EMD) in the form of Demand draft drawn in favour of Bharat Heavy Electrical Limited payable at Chennai. Tenders not accompanied with full EMD will not be considered

4. Tenders must be submitted to the undersigned in the manner prescribed below (PART I & II) latest by **20-05-2010** before opening of **TECHNICAL BID** commences. Technical bid shall be opened at **15.30** Hrs on **20-05-2010**.

**PART I ( Techno – Commercial Bid)**

(1) NIT (2) Special terms and conditions. (3) General terms and conditions. (4) GCC –RA (5) Technical Specifications. (6) SD BG –FORMAT (7) Rate schedule (Un Priced). (8) NO deviation –Format (9) EMD with covering letter in sealed cover.

**PART II ( Price Bid)**

(1) Price Bid (separately for Alt-I & Alt –II) with covering letter in sealed cover  
The above sealed Part I & II covers shall be enclosed in main cover. All the cover shall be superscribed with Enquiry No and due date & Part No. Main cover shall be superscribed with 1) details of cover enclosed 2) Enquiry no & due date of submission 3) Name of the job/ tender 4) Name of Bidder With complete address contact no, fax no, email id etc

5. The **port** of delivery for THIS cranes shall be **CHENNAI** in India.
6. BHEL reserves the right to accept or reject any or all tenders without assigning any reason what so ever. (BHEL reserve the right to reject any offer in case of any deviation from tender specifications)
7. BHEL reserves the right to go for a reverse auction instead of opening the submitted sealed bid, which will be decided after technical evaluation. As such the bidders should submit their best prices in the sealed price bid. However, bidders are required to confirm their acceptance of "General terms and conditions" governing reverse auction specifically in their technical bid. The general terms and conditions governing reverse auction are given in the Annexure of tender enquiry. Bidders are also required to furnish following details in their techno commercial bid, for this purpose (RA).

Authorization of representative who will participate in the on line reverse auction process;

- a) Name and designation of official
  - b) Postal Address (Complete)
  - c) Telephone Nos. (Land line & Mobile both)
  - d) FAX No
  - e) E-mail address
  - f) Name and Place /State/Country, where from he will participate in the reverse auction.
8. For makes of all major components of the crane bidder must fill the annexure IV failing which the bid shall be rejected
9. All addenda, corrigendum, amendments and clarifications to this tender will be hosted in this web page and not in the news paper. Bidders shall keep themselves updated with all such amendments
10. BHEL takes no responsibility for any delay /loss of documents or correspondences sent by courier / post
11. purchase preference will be given to CPSU as per guide lines of Govt of India
12. Bids once submitted shall not be returned.

  
**AGM/ P&S**

<b>2. SPECIAL TERMS AND CONDITIONS.</b>		
Sealed tenders in duplicate in two part bid system ie Part-I- Techno commercial bid and Part-II- Price bid are invited for supply, supervision of installation and commissioning of ONE number 500MT Capacity Portal Gantry Crane as per detailed specifications so as to reach us on or before the date of opening. The tenders (Part-I only) will be opened at 15.30 Hrs (IST) on <b>20 05 2010</b> . The tenderers are advised to submit the bid in conformity with the following.		
	1. Offer should be submitted in <b>TWO PART BID</b> system as under:	Confirmation by M/s
1.1	<b>(Part-1) – TECHNO-COMMERCIAL BID</b> alongwith <b>EMD</b> should include the following:- i) Technical specifications of the offered cranes as per Annexure-II along with necessary catalogues, drawings, load charts and technical literatures for engine, torque converter, load moment device, pumps and motors of the offered crane.	
	ii) List of essential spares as required for 2 years operation	
	iii) The bidders shall enclose details/documents in support of 'Experience' given above in <b>1.Notice inviting tender Clause (Part-1)</b> .For each qualifying requirement given above the bidder shall submit the documents specifically in line with the Qualifying Requirements, as given above in the NIT.	
	iv) Authorization from the manufacturer of offered crane in favor of the dealer, in case the bidder is an authorized Indian dealer.	
	v) Order shall be placed on the original manufacturer only.	
	vi) Details of safety devices/controls to be provided in the crane as standard and as optional.	
	vii) DETAILS OF SHIPPING	
	viii) Rate Schedule( Un-priced), with a confirmation that all the items of the Rate Schedule of this NIT have been quoted.	
	ix) Details of service facilities available in India for ' <b>After Sales Service</b> '.	
	x) Acceptance to Commercial terms and conditions.	
	xi) ' <b>Deviation statement / No Deviation CERTIFICATE</b> ' from tender conditions of this NIT.(incase the deviation is not acceptable BHEL reserve the right to reject offer.	
1.2	<b>Part II (PRICE BID):-</b>	
	i)As per Rate Schedule format enclosed (Annexure-IV )	
	ii)The bidders should fully understand scope of supply and their responsibilities under the tender specifications before quoting. The bidders are required to quote the rates as per rate schedule only, in	

	part-II price bid. Conditional price bid or price bid with any deviation are liable to be rejected. No cutting/erasing/over writing shall be done in the price bid, or correction if any shall be duly authenticated by the signatory. Order will be placed on either Alt –I (Main) or Alt –II (Main equipments with additional requirements ) only.	
1	<p>Following should be super scribed on the envelopes of the two parts of the Bid.</p> <p>Part I Techno-Commercial Bid :-</p> <p style="text-align: center;">Tender for : Tender No. <span style="float: right;">Due on</span></p> <p style="text-align: center;">:</p> <p>Part II (Price bid)</p> <p style="text-align: center;">Tender for : Tender No.</p>	
2	<p>Both Part I and Part II should be individually sealed and superscribed as indicated above and shall be enclosed in one main envelope duly sealed and superscribed as:</p> <p style="text-align: center;">Tender for : Tender No. : <span style="float: right;">Due on :</span> Containing Part I and Part II of the offer.</p>	
3	The tenders should be sent sufficiently in advance so as to reach before the due date and time. BHEL shall not be responsible in case of delay in receipt of tenders.	
4	<p>Inspection and Supervision of Installation &amp; Commissioning &amp; Training</p> <p>The supplier shall offer the cranes for inspection and for load test at manufacturer's works as per international norms and as per mutually accepted quality plan, according to the load charts supplied along with the offer. The tests shall be carried out in presence of BHEL Engineers or its nominated representative.</p> <p><b>a)Installation and commissioning</b> of cranes at site will be under supervision of competent engineer from the manufacturer. The Load test and Acceptance Test shall be carried out on assembly/commissioning of cranes at site in presence of Engineers from manufacturer and equipments will be taken over on successful completion of such tests. At each site, load test shall be carried out with available load.</p> <p><b>b)TRAINING:-</b> Necessary training for operation &amp; maintenance shall be given to two BHEL personnel free of charge for ONE week at manufacturers works and again at site for another ONE weeks during commissioning.</p>	<p>a)</p> <p>b)</p>
5	The delivery required shall be 12(twelve) months from date of receipt of P.O. However, tenders should indicate the best possible delivery period.	
6	Offers should be valid for a period of 90(Ninety) days from the date of opening of Techno-Commercial bid (Part-I).	

7	Service support of the equipment under purchase is of utmost concern. Tenders shall elaborate on the service network and spare parts availability which are to be ensued to maintain the equipment after initial commissioning and completion of warranty period. In case service/spare parts facilities are not available in India, tenders shall indicate the maximum possible time in making the services available from places outside India.	
8	The equipment being offered, should be of robust design and suitable for operations in Indian climatic conditions such as saline atmosphere, ambient temperature up to 50° C. The electrical and controls should be tropicalised to withstand such climatic conditions.	
9	<p>In case the equipment is offered from outside India, the tenders shall also submit following information along with techno-commercial bid (Part-I).</p> <ul style="list-style-type: none"> <li>a) Gross/Net weight of Equipment along with accessories in KGs.</li> <li>b) Volume of cargo in packet condition in Cubic Meter</li> <li>c) Number of packages and their individual weight/volume in MKS system, along with tentative shipping list.</li> <li>d) Name of the nearest load port and its distance from works.</li> <li>e) Approx. voyage time from load port to the port in India.</li> <li>f) Ocean freight from load port to the port in India. To be furnished in Rate Schedule format-Annexure-IV</li> <li>g) 'Name of Original Foreign Supplier with their complete addresses on whom order is proposed to be placed/issued.</li> <li>h) In case of payment through Letter of Credit, names of Beneficiary and Banker with account details.</li> </ul>	<ul style="list-style-type: none"> <li>a)</li> <li>b)</li> <li>c)</li> <li>d)</li> <li>e)</li> <li>f)</li> <li>g)</li> <li>h)</li> </ul>
	<p>Notes:</p> <ul style="list-style-type: none"> <li>i) Letter of Credit (L/C) can be opened only in the name of the original foreign supplier and it should be same on whom Purchase order is to be issued L/C shall be established by BHEL about 60(Sixty) days prior to shipment of crane for the 100% order value however payment shall be released as per clause 'Payment Terms of the NIT. The supplier shall intimate dispatch plan well in advance. Indian suppliers shall not be paid through L/C.</li> <li>ii) For evaluation of bids, since the bids are expected to be in different currencies, the exchange rate shall be considered as 'T.T. selling rate' of State Bank of India on the date of RA / price Bid opening. In case of Holiday, rates for previous day shall be considered.</li> <li>iii) Normally no deviation to the tender conditions is accepted. In case of any deviations taken by bidders and not withdrawn subsequently, BHEL reserves the right to either reject the offer or load the offer appropriately for evaluation purpose, based on nature of deviation. The loading criterion in such cases will be communicated to the bidders which will be final and binding.</li> </ul>	<ul style="list-style-type: none"> <li>i)</li> <li>ii)</li> <li>iii)</li> </ul>

	iv) All LC processing charges except opening charges with our bankers shall be borne by seller .Also all foreign banker charges including opening charges by foreign bank shall be to your account	
10	<p>Payment Terms: The supplier shall adhere to the following payment terms.</p> <p>a)90% of FOB /Exworks value of crane and spares against dispatch documents.</p> <p>The set of dispatch documents for 90% payment shall be as follows:-</p> <ul style="list-style-type: none"> <li>• Three Original of tax invoices (Invoice). The invoice to clearly indicate detail of spares (As per point No. 20 of Tech. Specs.) and lubricants/consumables (Required for commissioning of crane) dispatched along with crane.</li> <li>• Full set of clean on Board Bill of Lading-In Original (in case of foreign supplier)</li> <li>• One original and one copy of packing list.</li> <li>• Certificate of Country Of Origin issued by appropriate authorities. (In case of foreign supplier)</li> <li>• Load Test Certificate of the Crane at Manufacturer Works, duly certified by BHEL or its Authorized Agency or its waiver.</li> <li>• Warranty Certificate for the goods.</li> <li>• Certificate confirming that three sets of Catalogue of crane model supplied, operating &amp; maintenance manuals, parts list of crane supplied. Shop manual for bought out items &amp; boom repair manual have been dispatched to BHEL, with proof of dispatch.</li> <li>• Certificate confirming "goods supplied are new".</li> </ul> <p>b) 100% Taxes/Duties as applicable against dispatch documents.</p> <p>c ) Balance 10% of ex-works/FOB value of crane and spares along with Supervision charges for assembly, testing and commissioning of crane at BHEL site within 30 days of commissioning/acceptance test at site against Performance bond/Bank Guarantee of 10% of order value.</p> <p>e) 100% Ocean freight and Insurance charges, as applicable, on receipt at port and custom clearance of the total consignment (crane and spares) in case of foreign supplier.</p> <p><b>NOTES:-</b> Tenders are required to specifically confirm acceptance of these payment terms in their techno-commercial offer (Part-I Bid). <b>No advance payment shall be paid.</b></p>	<p>a)</p> <p>b)</p> <p>c)</p> <p>e)</p>
11	<p><b>WARRANTY</b></p> <p>The crane offered shall carry a warranty for a period of 12 months from the date of installation at site or 2000 hrs. of operation, whichever occurs earlier. Rectification/replacement required during the warranty period will be arranged by the supplier free of cost including to and fro transport charges and import duty/excise duty/other taxes/insurance etc., payable on replacement items.</p>	



12	The supplier shall provide three free service visits of Their Service engineer from Indian Service Centers independent of manufacturer service Engineer's visit, during the warranty period. Each visit shall be of at least two days Duration at site. In addition to above, for each of the crane the supplier shall also Provide here free visits of Manufacturer's service engineer during the warranty Period. These free visits shall be in addition to deployment of service engineers by the supplier to attend to break downs, if any, during the warranty period.	
13	All lubricants/consumables (except fuel) required for successful commissioning of the crane shall be supplied along with the crane without any extra cost.	
14	No separate Indian agents commission will be payable. The bidder to confirm this Specifically in their techno-commercial bid.	
15	On acceptance of techno-commercial and price bids, BHEL reserves the right to conclude the contract/order either on FOB 'OR' on C&F/CIF basis at its sole discretion.	
16	In case of any contradiction between General Terms & Conditions and Special Terms & Conditions, the latter shall prevail.	
17	Unsolicited rebate/discount shall not be accepted after bid opening.	
18	All sheets of the offer should be duly signed and stamped by the tenderers and should be submitted along with the Part-I bid.	
19	<p>Delivery Instructions: The Crane complete with its spares shall be dispatched as one lot only in break bulk cargo and no part consignment shall be acceptable. The supplier to ensure following essential requirements while arranging shipment.</p> <p>a) Ship must not be beyond 25 years of age.</p> <p>b) Ship must be accredited by Transchart or Lloyds.</p> <p style="text-align: right;">Sgt AGM/ P&amp;S</p>	<p>a)</p> <p>b)</p>

	<b><u>3.GENERAL TERMS AND CONDITIONS</u></b>	Confirmation by M/s
1	Manufacturer's name, their trade mark and brand, if any should invariably be mentioned in the tender and illustrative leaflets in duplicate giving technical particulars etc., should be attached to the tender, to facilitate consideration of the offer.	
2	Materials should be of best quality and correct to specifications, relevant DIN/ISO/ANSI standard or any other equivalent INTERNATIONAL standard specification.	
3	Correct date of effecting supplies in the event of an order from this office should be recorded in the tender.	
4	Please note that our terms of payment are as per clause 10 of "SPECIAL	

	TERMS AND CONDITIONS" (enclosed.)	
5	Bharat Heavy Electricals Limited does not bind itself to accept the lowest tender, but reserves to itself the right to accept or reject all or part of any tender at its discretion.	
6	No enhancement of rate, whatsoever the cause, will be allowed once the offer is accepted and the order is placed. Withdrawal of the offer after it is accepted or failure to make the supply within the schedule period will entail cancellation of purchase order and forfeiture of S D and or purchase at the risk and cost of supplier.	
7	The supplier shall communicate 'Acceptance of the Purchase Order' within 15 days from the date of issue.	
8	Security Deposit (S.D) : The successful bidder shall furnish a Security Deposit (SD) in the form of Bank Guarantee for an amount equivalent to 10% of Order value for the satisfactory execution of the Purchase Order (PO) in accordance with the terms and conditions and delivery specified in the PO. The BG shall remain valid till completion of delivery period plus two months. The BG shall be submitted as per the format given in this tender enquiry (Annexure-III). The supplier shall extend the validity of the BG in case of delay in delivery. The bank guarantee (BG) shall be submitted from a Bank as per the list enclosed. 'OR' from any other scheduled Bank in India. However, discretion of its acceptance shall lie solely with BHEL. The supplier shall submit the S.D three months prior to shipment of the crane. The above SD shall be returned after receipt of 'Performance Bank Guarantee' as mentioned against Sl. No. 12 below.	
9	Where Sales Tax/VAT is payable extra, it will only be paid if registration numbers both under local sales tax/VAT and Central Sales Tax are specifically mentioned on the invoice. Tenderers should invariably quote their sales tax/VAT Registration No. in offer.	
10	Liquidated Damages : It is clearly understood between the parties to the contract that the delivery of the goods specified in the purchase order should be made within the time limit prescribed. Where the seller supplies or despatches the goods beyond the delivery period specified, the purchaser will have no obligation to accept the goods. If accepted, liquidated damages at the rate of ½% (half percent) of the value of goods in arrears per week subject to a maximum of 5% (five percent) of order value, will be levied at the discretion of the purchaser, without prejudice to any other relief of compensation due to the purchaser under any other condition to the contract.	
11	Risk Purchase : alternatively, the purchaser at his option, will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole or any part of the goods which the supplier fails to deliver or dispatch within the stipulated as aforesaid, or if the same were not available, the best and the nearest available substitute therefore. The seller shall be liable for any loss which the purchaser may sustain by reason of such risk purchase in addition to L.D at the rate mentioned in clause 10 above	

12	Inspection ; All goods and work are subject to our inspection either at your works or after delivery as may be agreed. The decision of BHEL shall be final. Rejected goods will be returned to the supplier at his cost including freight on original shipment. The tenderers shall also offer load test/over load test of the crane at manufacturers works in presence of engineers from BHEL Load test shall also be carried out with available load at site as per load chart of the crane.	
13	S D / Performance Bank Guarantee : The crane will be guaranteed by the tenderer against any manufacturing defect, bad workmanship, bad material used etc., for a period of 12 months from the date of commissioning at site or 2000 hours of operation whichever is earlier. Any material found defective or falls within the guarantee period due to any of the above reasons within this period will have to be replaced by the supplier free of cost and any other charges including to and fro transportation charges etc., will also be borne by him. A Bank Guarantee from bank as per enclosed list of banks or any other scheduled bank in India, and equal to 10% of the Order value and valid upto 12 months from the date of installation and commissioning of crane at site for the satisfactory performance of the crane shall be furnished at the time of claiming final 10% payment. Discretion of acceptance of BG from any other scheduled bank in India, shall be solely with BHEL.	
14	<b>INSURANCE</b> : Wherever specifically agreed to, the supplier will insure at his cost the goods for all transit risks including 90 days storage risk from the date of delivery of the goods at the final destination. In all other cases, supplier must furnish particulars of despatch i.e., station of dispatch and destination, name of the goods, number of cases and their weights, value of the goods including all taxes, duties, levies and freight etc., for each consignment immediately after the dispatch of goods. Failure to do this will make the supplier responsible for making good any loss which might have otherwise been recovered from insurers. Note: However, the supplier shall still remain responsible for defective parts or short supply and defective packing.	
15	Metric System : Tenderers are requested to give metric measurements while quoting.	
16	Arbitration : All disputes between the parties to the contract arising out of or in relation to the contract. Other than those for which the decision of the Engineer or any other person is by the contract expressed to be final and conclusive, shall after written notice by either party to the contract to the other, party, be referred to sole arbitration of the General Manager or his nominee. The arbitration shall be conducted in accordance with the provision of the Arbitration and Reconciliation Act. 1996/the Rules of Conciliation and Arbitration of the International Chamber of Commerce, Paris. The place of Arbitration shall be Chennai (India).	
17	Any suites in respect of this contract shall have the jurisdiction of the courts of Chennai (India) only	

	<b><u>4. GENERAL TERMS AND CONDITIONS OF REVERSE AUCTION (RA)</u></b>	Confirmati on by M/s
	Against this NIT for the subject work, tender may be processed through Reverse Auction mode i.e., ON LINE BIDDING ON INTERNET. The General Terms and conditions of the RA shall be as follows:	
1	For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.	
2	BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.	
3	BHEL will inform to the vendor in writing, in case of reverse auction along with the details of Service Provider to enable them to contact & get trained.	
4	“Business rules” like event date, time, Start price, bid decrement extensions etc., also will be communicated through service provider for compliance.	
5	Vendors have to fax the Compliance form in the prescribed format (provided by Service provider) before start of Reverse auction.	
6	BHEL will provide the calculation sheet (eg., EXCEL sheet) which will help to arrive at “Total Value Based on Rate Schedule”.	
7	Reverse auction will be conducted on scheduled date & time	
8	At the end of Reverse Auction event, the lowest bidder value will be known on the network.	
9	The lowest bidder has to Fax the duly signed Filled-in prescribed format as provided on case-to-case basis to BHEL through Service provider within 24 hours of Auction without fail.	
10	During Reverse Auction, if no bid is received within the specified time, BHEL at its discretion, may decide to revise opening price/scrap the reverse auction process/proceed with conventional mode of tendering.	
11	Sealed bid Reverse Auction : The opening bid (in the initial auction) of the bidders shall be same as the quoted in their Final Sealed price submitted to BHEL. The bidders shall confirm in writing to BHEL that their opening bid (in both cases) shall be same as that quoted in their final sealed price bids submitted to BHEL against this NIT along with Technical Bid (Part-I).	
12	Bids-given by the bidders during the Reverse Auction process will be taken as an offer to execute the work. Bids once made by the bidder, can not be cancelled/withdrawn and bidders shall be bound to execute the work as mentioned above at the final bid price. Should be bidder (Lowest) back out and not execute the contract as per the rates quoted. BHEL shall take action as appropriate.	
13	BHEL reserves the right to cancel Reverse Auction (RA) without assigning any reasons and resort to considering the sealed bids submitted by vendor for processing and finalizing the tender.	
14	Any variation between the on-line bid value and the signed document will be considered as sabotaging the tender process and will invite disqualification of vendor to conduct business with BHEL as per prevailing procedure.	
15	In case BHEL decides not to go for Reverse Auction procedure for the tender enquiry, the Price bids and price impacts. If any, already submitted and available with BHEL shall be opened as per BHEL’s standard practice.	
	AGM / P & S	

**5.0 TECHNICAL SPECIFICATION**  
**(450MT + 10% SAY 500MT PORTAL GANTRY CRANE)**

**A. PRINCIPAL DIMENSIONS:**

DIMENSIONS IN METERS				
SL NO.	DESCRIPTION	A	B	C
1	SPAN	26.67 (Three Segments)	(26.67) + ( 2.0) (Three Segments)+( One segment)	(26.67) +( 2.0) +( 1.5) (Three Segments)+( One segment) +(One segment)
2	HEIGHT OF MAIN COLUMN	21.88 (Four Segments)	(21.88) +( 1.6) (Four Segments)+( One segment)	(21.88) +( 1.6 )+( 2.00) (Four Segments)+( One segment)+(One segment)
3	SHORT COLUMN STARTING HEIGHT	17.20 (One Segment)	(17.20)+( 1.6) (One Segment)+(One Segment)	(17.20) +( 1.6) +( 2.00) (One Segment)+(One Segment)+(One segment)
4	TOP HEIGHT OF THE GRIDER	24.990	(24.990) + (1.6)	(24.990) + (1.6) +( 2.0)
5	LIFTING HEIGHT	21.58	(21.58)+(1.6)	(21.58)+(1.6)+(2.0)

Optional: Longitudinal Motion ( Long Travel) 200 mm from the centre on both direction.

**Permissible tolerance: 0.05 Mete**

**OTHER REQUIREMENTS:**

1. Drives: (1) Main hoist (2) Main hoist micro (3) Transverse (4) Transverse micro.
2. Safety Feature: 1) Phase sequence protection (2) Over load / Thermal protection (3) Over hoisting and transverse limit protection.
3. Load test and over load test shall be carried out as per manufacturer's standards at their works.
4. Spares required for two years operation.
5. 450MT +10% say 500MT Double Grider Special Gantry Crane as per IS 3177 or FEM or equivalent International Standards. The cranes shall be of latest technology with high performance, safety, ease in maintenance, good appearance, best quality and perfect after sale service.
6. Proper routing & clamping of copper piping must be ensured.
7. Supplier shall be provide cables, limit switches, Control panels, Junction Boxes, Siren indication lamp and 4 nos. floodlights on bottom of grider other necessary accessories with crane.
8. Supplier shall provide Remote operated. RRC (Radio Remote Controller) of push button or joy stick type. There should not be any frequency interference between remote controllers to ensure safety.
9. Supplier shall provide 2 Nos. of power indication lamps (LED type). It will work when cranes under operation.
10. Supply of a tool box along with tools like torque wrench, portable hydraulic jack, hand grease gun, set of spanners, screw drivers, hammers, multimeter, megger, tong tester etc. required for maintenance of crane. One set of tool box with tools and tackles shall be supplied for each crane.

11. DESIGN BASIS (Structural Details): The crane shall be of welded double web wide BOX construction and shall be weld-able mild steel in compliance with the relevant standard. However, high strength weld able structural steel also may be used wherever required in compliance with the relevant standards.
12. Lifting hooks: Standard Ramshorn hooks shall be used conforming to DIN 15402. The hooks shall be with trapezoidal section. All hooks shall be provided with closing finger and swivel lock arrangement. Hooks shall be tested as per statutory requirement and certificate furnished. Hook locking system to be provided in Hook Block Assembly.
13. Wire ropes: The rope dia 36mm, python Power 9R. Fleet angle of the rope in any operating position shall not exceed 4 deg.
14. Brakes: The brakes shall be provided for all motions on the high-speed pinion shaft of the gear train. All brakes must be DC Electro magnetic Disc Brakes.  
The Brakes provide shall have the following features:
  - External adjustments as well as automatic wear compensation
  - Prior information for replacement.
15. Lubrication: The lubrication nipples are collected into logical groups for easier lubrication. One or two set of nipples are to be in trolley and two on the bridge, one on each end carriage.
16. Suitable Lifting beam of rated capacity to accommodate suitable slings shall be provided on the portal gantry crane to lift Generator stator as per the sketches enclosed
  - 1) Sketch I – Lifting beam arrangements
  - 2) Sketch –II Endless sling fitting arrangements on Lifting beam of portal gantry crane and Generator .
17. System Voltage: The power at the down shop leads will be available at 415V, 3-phase, 4 wire,  
50 Hz for with 4<sup>th</sup> wire being the earthed conductor. The equipment selected shall be suitable for voltage variation of +10%, -15% and frequency variation of 50HZ, +5%, -6%. However, drive system for high capacity cranes shall be selected for voltage operating range of 70% to 110% of rated supply. Also this shall operate satisfactorily in case of a voltage dip up to 30% for duration of 500 milliseconds.
18. Inspection and Testing: The equipment will be inspected as per the tests pre-identified in the Approved Quality Assurance Plan (QAP), relevant approved drawing, specification, data sheet etc. within three weeks from the award of the Contract, Supplier shall prepare and submit. QAP format for Purchaser's approval.
19. Functional test and full load test at factory: The cranes shall be assembled at shop and tested for full load and 25% over load test. Total Mechanical (except wire rope) & Electrical Equipments (all the electric equipment including cable inside the grider and cabin, motor for each mechanism) are to be erected and functionality tests are to be done. Equipment shall be inspected for structural control assembly, wheel alignment etc.

Apart from the above, equipment shall be tested for the Vibration, Noise, Temperature rise, Hardness etc. as applicable.

**6.0 ANNEXURE –I ( PART OF PRE-Q)**  
**DETAILS OF SUPPLY FOR LAST FIVE YEARS**

[illegible]

NOTE:-

- 1) Contract details of Purchaser shall be furnished correctly by bidder. If it is found that contract details furnished is not correct then BHEL reserves the right to reject the bid.
- 2) Supporting documents to be attached as P.O. and commissioning certificate.
- 3) All Documents shall be in English.

## **ANNEXURE -II - ( PART OF PRE-Q)**

<b>SL.NO.</b>	<b>CRITERIA</b>	<b>OBSERVATION</b>	<b>REMARKS</b>
1.	Customer Details		
2.	OEM of the Crane		
3.	Year of Purchase		
4.	Type/Model/Basic Capacity of the crane (MT)		
5.	Overall performance of the crane Poor/Satisfactory/Very Good/ Excellent (as per user)		
6.	Quality of after sales service – Poor / Satisfactory/ Very Good/ Excellent (as per user)		
7.	Any technical limitation of crane is observed during operation or not?		
8.	Incidence of Fatal Accident at site due to mal functioning of crane ( if any)		
9.	Overall Healthiness of the crane observed		
10.	<b>Summary of observation:</b>		
	(SIGNATURE & STAMP)		

**ANNEXURE -III****7 BANK GUARANTEE FORMAT****Annexure V**

Formats for execution of Bank Guarantees:

Note:- The Bank Guarantee bonds (BG) are to be submitted on non-judicial stamp paper of Rs. 100/- and should be only from any one of the below mentioned Banks, (1.State Bank of India, 2.State Bank of Hyderabad, 3.State Bank of Travancore, 4.State Bank of Mysore, 5.Canara Bank, 6.Bank of Baroda, 7.Punjab National Bank, 8.Deutsche Bank, 9.HDFC Bank, 10.Standard Chartered Bank, 11.Citi Bank, 12.Standard Chartered Grindlays Bank & 13.Bank of America)

**S D / PERFORMANCE BANK GUARANTEE**

1. In accordance of M/s Bharat Heavy Electricals Limited (A Government of India undertaking, a Company incorporated under the Companies Act 1956 having its Registered Office at 'BHEL House', SIRI Fort, New Delhi 110 049) through its PSSR Division located at CHENNAI 600035, (hereinafter called "the Company") having entered into a contract with ..... hereinafter called "the said contractor" which term includes 'suppliers' for the purpose of this Bond and under the terms and conditions of the Contract No: ..... dated ..... between BHEL, PSSR,CHENNAI and as per the contract, the contractor/supplier is to furnish a Performance Bank Guarantee for Rs ..... for the due performance of the equipment to be supplied under Bharat Heavy Electricals Limited PSSR

the above referred contract and for the fulfillment of all the terms and conditions of the contract. We ..... (indicate the name of the Bank) (herein after referred to as the Bank) at the request of ..... (contractor(s)) do hereby undertake to pay the Company an amount not exceeding Rs ..... against any loss or damage caused to or suffered or would be caused to or suffered by the Company by reason of any breach by the said contractor (s) of any of the terms and conditions contained in the said agreement.

2. We ..... (indicate the name of the Bank with full address), do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Company stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Company by reason of breach by the said Contractor(s) of any of the terms and conditions contained in the said Agreement or by the reason of the contractor(s) 'failure to perform' the said Agreement. Any such demand on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs .....

3. We undertake to pay unconditionally to the Company any money so demanded notwithstanding any dispute(s) raised by the Contractor in any suit, or proceedings pending before any Court or Tribunal or Arbitration or before any other authority relating thereto our liability under this present being absolute and unequivocal. The payment under this guarantee would not wait till the disputes have been decided by any Court or Tribunal or in the arbitration proceedings or by any other authority. The payment so made by us under this Bond shall be a valid discharge of liability for payment there under and the Contractor (s) shall have no claim against us for making such payment.

4. We ..... (indicate the name of Bank), further agree that the guarantee herein contained shall remain in full force and effect during the period that would betaken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Company under or



by virtue of the said Agreement have been fully paid and its claim satisfied or discharged or till ..... Office/Department/Division of the Company certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

5. (i) Unless a demand or claim under this agreement is made on us in writing on or before the ..... we shall be discharged from all the liability under this guarantee thereafter. But where such claim or demand has been preferred by the Company with the Bank before the expiry of the said date, the claim shall be enforceable notwithstanding the fact that the said enforcement is effected after the said date.

(ii) For the purpose of this clause, any letter making demand on the Bank by M/s BHEL will be dispatched by Registered Post with Ack. Due or by Telegram Bharat Heavy Electricals Limited PSSR or by any Electronic media addressed to the above mentioned address of the Bank shall be deemed to be the claim/demand in writing referred to above irrespective of the fact as to whether and when the said letter reaches the Bank, as also any letter containing the said demand or claim is lodged with the Bank personally.

6. We ..... (indicate the name of the Bank), further agree with the Company that the Company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the said Contractor (s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by any reason of any such forbearance, act or omission on the part of the Company or any indulgence by the Company to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating would, but for this provision, have effect of not so relieving us.

7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s)

8. It shall not be necessary for the Company to proceed against the contractor before proceeding against the guarantor-Bank and the guarantee herein contained shall be enforceable against them notwithstanding any security, which the Company may have obtained or obtain from the Contractor shall, at the time when proceedings are taken against the guarantor hereunder be outstanding or unrealised.

9. Any claim or dispute arising under the terms of this document shall only be enforced or settled in the Courts at CHENNAI.

10. The guarantor hereby declare that it has power to execute this guarantee and the executant has full powers to do so on its behalf under the proper authority granted to him/them by the guarantor

11. We ..... (indicate the name of Bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing. In witness whereof we ..... (indicate the name of Bank) have hereunto set out Bank Seal the ..... Day ..... month 2010..

**8. RATE SCHEDULE ALT -A****Annexure VI**

For felicitating erection of 500MW stator

Sl. No	DESCRIPTION	QTY	UNIT PRICE
1.0	<b>Total FOB/Exworks Price including packing &amp; forwarding , for supply of 1 number 500MT Portal gantry crane as per detailed specification enclosed with tender enquiry and technical specifications. Including essential spares</b> (bidder shall enclose the list with tech bid and itemized breakup price with price bid) . Supervision charges for for assembly testing & commissioning of the cranes at the BHEL site. Dimensions are in metres Span :26.67 (three segments ) Height of Main Column : 21.88 Metre (Four segments) Short column Starting height : 17.20 (one segment ) Top height of the girder :24.99 Mtr Lifting height 21.58 Mtr	1 No	
	Total FOB ..... port price (1.0+1.1)		
2.0	SHIPPING (OCEAN) FREIGHT UP TO UP TO CHENNAI SEA PORT IN INDIA		
3.0	Insurance (Marine) charges from manufacturing works up to CHENNAI SEA PORT IN INDIA		
	Grand Total CIF CHENNAI PRICE in Foreign currency. 1 to 3		
	*Foreign currency to Indian currency conversion factor		
	*Grand Total CIF CHENNAI PRICE in Indian currency .1 to 3		

\*applicable for Reverse Action ie during ON LINE BIDDING ON INTERNET

**Notes.**

1.0. Bidders are required to quote for each and every item from 1 to 3 as indicated above. Please indicate NA against items not applicable. All bidders shall indicate FOB price Foreign suppliers shall submit the ocean freight and insurance in Slnos 2 & 3 .

2.0 Any other charges, if not specified above, may also be indicated.

3.0 Incomplete offer received may not be considered.

4.0 The Rate shall be entered in figures as well as in words. In case of difference in rates between words and figures THE LESSER OF THE TWO will be treated as valid rate.

5.0. The Rate Schedule (unpriced) shall be enclosed by the bidders in their technical bid (Part-1), confirming specifically that all the items of the Rate Schedule have been quoted.

6.0, In case of Indian bidders cenvat/modvat credit (For Indian Bidders): The quotations must indicate Tariff item Number and rate/value of Ex-Duty applicable and CENVAT credit available to BHEL in such case party shall raise Cenvatable Invoice as per Excise Law/Rules. The amount of CENVAT Credit to BHEL will be considered while evaluation the bids.

(Signature and Seal of Tenderer)

**8. RATE SCHEDULE ALT -B****Annexure VI**

For felicitating erection of 800MW Gen.stator

Sl. No	DESCRIPTION	QTY	UNIT PRICE
1.0	<b>Total FOB/Ex-works Price including packing &amp; forwarding , for supply of 1 number 500MT Portal gantry crane as per detailed specification enclosed with tender enquiry and technical specifications. Including essential spares</b> (bidder shall enclose the list with tech bid and itemized breakup price with price bid) . Supervision charges for for assembly testing & commissioning of the cranes at the BHEL site. Dimensions are in metres Span :26.67 +2.0Mtr (3segments+1 segment) Height of Main Column : 21.88+1.6Mtr (4 segments + 1segment ) Short column Starting height : 17.20 +1.6Mtr(1 segment +1 segment ) Top height of the girder :24.99 +1.6Mtr Lifting height 21.58 +1.6Mtr	1 No	
	Total FOB ..... port price (1.0+1.1)		
2.0	SHIPPING (OCEAN) FREIGHT UP TO UP TO CHENNAI SEA PORT IN INDIA		
3.0	Insurance (Marine) charges from manufacturing works up to CHENNAI SEA PORT IN INDIA		
	Grand Total CIF CHENNAI PRICE in Foreign currency. 1 to 3		
	*Foreign currency to Indian currency conversion factor		
	*Grand Total CIF CHENNAI PRICE in Indian currency .1 to 3		

\*applicable for Reverse Action ie during ON LINE BIDDING ON INTERNET

**Notes.**

1.0. Bidders are required to quote for each and every item from 1 to 3 as indicated above. Please indicate NA against items not applicable. All bidders shall indicate FOB price Foreign suppliers shall submit the ocean freight and insurance in Slno 2 & 3 .

2.0 Any other charges, if not specified above, may also be indicated.

3.0 Incomplete offer received may not be considered.

4.0 The Rate shall be entered in figures as well as in words. In case of difference in rates between words and figures THE LESSER OF THE TWO will be treated as valid rate.

5.0. The Rate Schedule (unpriced) shall be enclosed by the bidders in their technical bid (Part-1), confirming specifically that all the items of the Rate Schedule have been quoted.

6.0, In case of Indian bidders cenvat/modvat credit (For Indian Bidders): The quotations must indicate Tariff item Number and rate/value of Ex-Duty applicable and CENVAT credit available to BHEL in such case party shall raise Cenvatable Invoice as per Excise Law/Rules. The amount of CENVAT Credit to BHEL will be considered while evaluation the bids.

(Signature and Seal of Tenderer)

**8. RATE SCHEDULE ALT -C****Annexure VI**

For felicitating erection of 800MW Gen.stator

Sl. No	DESCRIPTION	QTY	UNIT PRICE
1.0	<b>Total FOB/Ex-works Price including packing &amp; forwarding , for supply of 1 number 500MT Portal gantry crane as per detailed specification enclosed with tender enquiry and technical specifications. Including essential spares</b> (bidder shall enclose the list with tech bid and itemized breakup price with price bid) . Supervision charges for for assembly testing & commissioning of the cranes at the BHEL site. Dimensions are in metres Span :26.67 +2.0+1.5Mtr (3segments+1 segment+1 segment ) Height of Main Column : 21.88+1.6 +2.00Mtr (4 segments + 1segment +1segment) Short column Starting height : 17.20 +1.6+2.00Mtr(1 segment +1 segment +1 segment) Top height of the girder :24.99 +1.6+2.0Mtr Lifting height 21.58 +1.6+2.0Mtr	1 No	
	Total FOB ..... port price (1.0+1.1)		
2.0	SHIPPING (OCEAN) FREIGHT UP TO UP TO CHENNAI SEA PORT IN INDIA		
3.0	Insurance (Marine) charges from manufacturing works up to CHENNAI SEA PORT IN INDIA		
	Grand Total CIF CHENNAI PRICE in Foreign currency. 1 to 3		
	*Foreign currency to Indian currency conversion factor		
	*Grand Total CIF CHENNAI PRICE in Indian currency .1 to 3		

\*applicable for Reverse Action ie during ON LINE BIDDING ON INTERNET

## Notes.

1.0. Bidders are required to quote for each and every item from 1 to 3 as indicated above. Please indicate NA against items not applicable. All bidders shall indicate FOB price Foreign suppliers shall submit the ocean freight and insurance in Slnos 2 & 3 .

2.0 Any other charges, if not specified above, may also be indicated.

3.0 Incomplete offer received may not be considered.

4.0 The Rate shall be entered in figures as well as in words. In case of difference in rates between words and figures THE LESSER OF THE TWO will be treated as valid rate.

5.0. The Rate Schedule (unpriced) shall be enclosed by the bidders in their technical bid (Part-1), confirming specifically that all the items of the Rate Schedule have been quoted.

6.0, In case of Indian bidders cenvat/modvat credit (For Indian Bidders): The quotations must indicate Tariff item Number and rate/value of Ex-Duty applicable and CENVAT credit available to BHEL in such case party shall raise Cenvatable Invoice as per Excise Law/Rules. The amount of CENVAT Credit to BHEL will be considered while evaluation the bids.

(Signature and Seal of Tenderer)

9. *TENDER*

*CERTIFICATE FOR NO DEVIATION*

*I, \_\_\_\_\_ of  
M/s \_\_\_\_\_ her  
eby certify that there is no deviation from the Tender conditions either  
technical or commercial and I am agreeing to all the terms and  
conditions mentioned in the Tender Specification.*

*SIGNATURE OF THE TENDERER*