BHEL/ PSSR/PUR/EC-19094 dt 18 02 2010

### TENDER ENQUIRY

<u>FOR</u>

**SUPPLY OF 1 NUMBER HEAVY LIFT CRAWLER MOUNTED LATTICE BOOM HYDRAULIC CRANE FOR 800 MW BOILER PROJECT 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	
Enquiry No & Date EC 19094 / 18 02 2010	Supply of 1 number heavy lift crawler mounted lattice boom hydraulic crane, Critical Loads to be handled by offered Crane (360° slew)  a) Minimum 160 MT below hook at minimum 18M radius or above with minimum clear height of 102 M Under hook. This requirement can be met with main boom or with suitable boom & Jib combination. The hook block with a ceiling girder flange width of 1.5 M must not foul with the boom at girder elevation (Top of girder) of 97 M. At this elevation, a minimum clearance of 0.50 M must exist between the boom and the girder flange. A lifting drawing showing clearances between the boom and the girder flange shall be submitted with the technical offer.  b) Minimum 10 MT below hook at minimum 50 M radius with minimum clear height of 130 M under hook with suitable boom and jib combination.  Note: Above capacities should be met either with the basic crane or with suitable capacity enhancer. Weight of hook block and lifting slings shall be deducted from the lifting capacity of the crane to meet above requirements.  c).In addition to the above, suitable length Luffing Jib not less than 70M shall be supplied so as to attain the Main boom with Luffing Jib combination of 130M or above. The Luffing boom shall be suitable to connect with Main boom of the crane that will be supplied along with Crane. All the accessories required for luffing Jib operation such as Luffing Winch, fittings and all offsets etc shall be supplied along with crane.	Last Date of Tender Submissi on & opening  11/03/ 2010 15.30 Hrs (IST)

#### **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 in 5.TECHNICAL SPECIFICATION Clause No:11 (Part-1). For each 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 4300 USD (US Dollars Four thousand three hundred only) or equivalent amount towards Earnest Money Deposit (EMD) in the form of Demand draft drawn in favour of Bharat Heavy Elctricals 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 **11-03-2010** before opening of **TECHNICAL BID** commences. Technical bid shall be opened at **15.30** Hrs on **11-03-2010**.

#### 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 with covering letter in sealed cover

The above sealed Part I & II covers shall enclosed in main cover .All the cover shall super-sc Scribed 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 with out assigning any reason what so ever.
- **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. How ever , 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.** Bids once submitted shall not be returned.

AGM/P&S.

		2. SPECIAL TERMS AND CONDITIONS.		
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 heavy lift crawler mounted lattice boom hydraulic				
		er detailed specifications so as to reach us on or before the date		
	•	15.30 Hrs (IST) on 09-06-09.	, ,	,,,
		ers are advised to submit the bid in conformity with the following	ıa.	
		offer should be submitted in <b>TWO PART BID</b> system as		Confirmation by M/s
	unde	•		a.g
1.1	unac	(Part-1) - TECHNO-COMMERCIAL BID should include the		
1.1		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 against Sl.No.20 of Technical		
	,	specifications (Annexure-II) of the enquiry. It may be noted that		
		the list of essential spares should be as per Sl. No. 20 of Technical		
		Specifications only.		
	iii)	The bidders shall enclose details/documents in support of		
		'Experience' given in <b>5.TECHNICAL SPECIFICATION Clause No:11</b>		
		(Part-1) 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.		
		DETAILS OF SUIDDING		
	vii)	DETAILS OF SHIPPING		

	viii) Rate Schedule( Un-priced), Rate Schedule (Optional) (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 'After Sales Service'.
	x) Acceptance to Commercial terms and conditions.
	xi) <b>'Deviation statement / No Deviation CERTIFICATE '</b> from tender conditions of this NIT.
1.2	Part II (PRICE BID):-
	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.
1	Following should be super scribed on the envelopes of the two parts of the Bid.
1	Part I Techno-Commercial Bid :-
	Tender for :
	Tender No.
	Due on :
	Part II (Price bid)
	Tender for :
	Tender No.
	Both Part I and Part II should be individually sealed and
2	superscribed as indicated above and shall be enclosed in one main
	envelope duly sealed and superscribed as:

	Tender for: Tender No.:  Containing Part I and Part II of the offer.	
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	Inspection and Supervision of Installation & Commissioning & Training 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.  a)Installation and commissioning 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.  b)TRAINING:- Necessary training for operation & maintenance shall be given to two BHEL personnel free of charge for two weeks at manufacturers works and again at	a) b)
	site for another two weeks during commissioning.	
5	The delivery required shall be 10(ten) 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).	
	Service support of the equipment under purchase is of utmost	

7	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.	
0	The equipment being offered, should be of robust design and	
8	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	In case the equipment is offered from outside India, the tenders shall also submit following information along with techno-	
	commercial bid (Part-I).	
	a) Gross/Net weight of Equipment along with accessories in	a)
	KGs.	
	b) Volume of cargo in packet condition in Cubic Meter	b) c)
	<ul> <li>c) Number of packages and their individual weight/volume in MKS system, along with tentative shipping list.</li> </ul>	
	d) Name of the nearest load port and its distance from works.	d)
	e) Approx. voyage time from load port to the port in India.	e)
	f) Ocean freight from load port to the port in India. To be	f)
	furnished in Rate Schedule format-Annexure-IV	
	g) 'Name of Original Foreign Supplier with their complete	g)
	addresses on whom order is proposed to be placed/issued.	<b>b</b> )
	<ul> <li>h) In case of payment through Letter of Credit, names of Beneficiary and Banker with account details.</li> </ul>	h)
	Notes:	
	i) Letter of Credit (L/C) can be opened only in the name of	i)
	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.  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.
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.  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
Payment Terms: The supplier shall adhere to the following payment terms.
a)90% of FOB value of crane and spares against dispatch (a)
documents.
The set of dispatch documents for 90% payment shall be as
follows:-
<ul> <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> </ul>
Certificate of Country Of Origin issued by appropriate

	<ul> <li>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 waival.</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> <li>b) 100% Taxes/Duties as applicable against dispatch documents.</li> <li>C) Balance 10% of 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.</li> <li>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.</li> <li>NOTES:-</li> <li>Tenders are required to specifically confirm acceptance of these</li> </ul>	e)
	payment terms in their techno-commercial offer (Part-I Bid). No advance payment will be paid .	
	WARRANTY	
11	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.	
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.	
	All lubricants/consumables (except fuel) required for successful	
1.0	commissioning of the crane shall be supplied along with the crane	
13	without any extra cost.	
	No separate Indian agents commission will be payable. The bidder	
14	to confirm this Specifically in their techno-commercial bid.	
	On acceptance of techno-commercial and price bids, BHEL	
	reserves the right to conclude the contract/order either on FOB	
15	'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.	
	Delivery Instructions: The Crane complete with its spares shall be	
19	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.	
	a) Ship must not be beyond 25 years of age.	a)
	b) Ship must be accredited by Transchart or Lloyds.	b)
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	3.GENERAL TERMS AND CONDITIONS	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 II 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	
7	and or purchase at the risk and cost of supplier.	
'	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	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	
. 0	with available load at site as per load chart of the crane.	
12	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.	
13	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	
14	parts or short supply and defective packing.  Metric System: Tenderers are requested to give metric measurements while quoting.	
15	while quoting.  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).	
16	Any suites in respect of this contract shall have the jurisdiction of the courts of Chennai (India) only	

	4. GENERAL TERMS AND CONDITIONS OF REVERSE AUCTION	Confirmation by M/s
	<u>(RA)</u>	
	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).	
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	
·	
quoted. BHEL shall take action as appropriate.	
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.	
Any variation between the on-line bid value and the signed document	
will be considered as sabotaging the tender process and will invite	
prevailing procedure.	
In case BHEL decides not to go for Reverse Auction procedure for the	
tender enquiry, the Price bids and price impacts. If any, already	
· ·	
•	
AGM / P & S	
	final sealed price bids submitted to BHEL against this NIT along with Technical Bid (Part-I).  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.  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.  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.  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.

	5.0 TECHNICAL SPECIFICATIONS OF CRANE (CRITICAL)	Confirmation by M/s
1	Description: Crawler Mounted Lattice Boom Hydraulic Crane	
2	Standard: - As per DIN/ISO/ANSI/BIS Standard	
3	Stability Rating – 75%	
4.0	Critical Loads to be handled by offered Crane (360° slew)	
	a) Minimum 160 MT below hook at minimum 18M radius or above with	a)
	minimum clear height of 102M Under hook. This requirement can be met	
	with main boom or with suitable boom & Jib combination. The hook block	
	with a ceiling girder flange width of 1.5 M must not foul with the boom at	
	girder elevation (Top of girder) of 97M. At this elevation, a minimum	
	clearance of 0.50 M must exist between the boom and the girder flange. A	
	lifting drawing showing clearances between the boom and the girder flange	
	shall be submitted with the technical offer.	b)
	b) Minimum 10 MT below hook at minimum 50 M radius with minimum clear	
	height of 130 M under hook with suitable boom and jib combination.	
	Note: Above capacities should be met either with the basic crane or with	
	suitable capacity enhancer. Weight of hook block and lifting slings shall be	
	deducted from the lifting capacity of the crane to meet above requirements.	
	a) In addition to the above switchle length I office I'll not less than 70M about	(C)
	c). In addition to the above, suitable length Luffing Jib not less than 70M shall	
	be supplied so as to attain the Main boom with Luffing Jib combination of	
	130M or above. The Luffing boom shall be suitable to connect with Main	
	boom of the crane that will be supplied along with Crane. All the accessories	
	required for luffing Jib operation such as Luffing Winch, fittings and all	
	offsets etc shall be supplied along with crane.	
4.1	Makes of the Major Components of crane:	
	All major components make shall be as per annexure – iv	
5	Boom hoisting, slewing, main/aux. hoisting, travel drives etc.: All Hydraulic	
	drives	
6	Central Ballast:-Base Frame for full ballast to meet offered load chart.	
		1

7	Engine:- Turbo charged water/coolant-cooled diesel engine of adequate	
	power, preferably CUMMINS/CATERPILLAR make & as per annexure -IV	
8	Winches: - All winches (main hoist, jib hoist and a boom/derrick hoist) to be	
	operated by hydraulic motors, drum with integrated planetary and spring	
	applied hydraulically released disc brake.	
9	Safety devices:- The crane shall be equipped with all the following safety	
	devices:	
	a) Cut off devices with exceeding the permissible load moments. Electronic	a)
	control to stop all dangerous operation in case of instability. Safe load	
	indicator with visual display in operator's cabin for load chart, maximum	
	allowed load, gross load, net load on hook, operating radius and single	
	boom/jib length, book/jib sheave height etc., and fault display	
	b) Safety valve against pipe and hose rupture	b)
	c) Hoist & boom hoist limit switches	(c)
	d) Display arrangement for self error detection system	d)
	e) Anemometer	e) f)
	f) Self Test System	g)
	g) Electronic inclinometer	g)
10	Hook Block: Suitable Hook blocks of approximately 400 MT, 250 MT, 100	
	MT capacities and a ball hook block to be provided. Modular hook block	
	also acceptable.	
11	Experience - Bidder shall meet all the following requirements:	
	a) Minimum Five (5)units of crawler cranes of quoted capacity as per	a)
	specification or higher capacity manufactured by OEM should have been	
	supplied and working any where in the world during last five years other	
	than the country of origin.(Details shall be as per Annexure enclosed with	
	the tender )	
	b) Performance Certificate ( As per annexure enclosed with the tender) of	
	at least three cranes from three different customers located any where in	b)
	the world other than country of manufacturing are to be furnished by bidder	
	.The certificates shall be in English duly signed & stamped by concerned	
	customer	(c)
		C)

	c)Offered crane as per specification model should be in current	
	manufacturing range	
12	After Sales Service Facility: The manufacturer or his authorised service	
	provider shall have suitable infrastructure in India to adequately take care	
	of after sales servicing/repairs of the crane. 6 periodic service visits each	
	of 2 days duration shall be provided by the Service Engineer of the Indian	
	Agent & 3 visits shall be provided by the manufacturer service engineer	
	during warranty period.	
13	Crane cabin: - Spacious cabin, swiveling sidewise with operating and control	
	/ monitoring instrument	
14	Crane Operation: - Multiple movements simultaneously.	
15	Electrical System :- 24 V DC	
16	Aviation Light: 24 double flash light mounted on lattice boom or jib head	
	with battery charges 220/24 V	
17	Tool Box: It shall contain 2 Nos. track adjusting hydraulic jacks, 4 Nos.	
	Boom handling slings besides Standard Hydraulic Test kit and Standard	
	Took Kit.	
18	Observation Camera: 2 Nos. to be installed at superstructure in winch area	
	with a single common monitoring unit in crane cabin for observation of	
	winches	
19	Self Erection System: The crane should consist of self erection system for	
	assembly and dismantling of crawler, carbody and operator cabin	
20	Overall crawler end to endouter width of the crane:-	
	Not above 11M	
21		
	Wire rope:-crane shall be supplied with sufficient length of wire ropes	
	suiting the total length of Main boom and length of jib so that the respective	
	hook blocks reach the ground level with highest boom/jib top elevation	
22	Spare Parts a) 2 Nos. Lattices of 6M length of each size of lattices pipes	
	used in boom sections. (b) 6 sets of Engine Filters and Hydraulic Filters	
23	Commissioning: Supervision of assembly and commissioning of crane shall	
	be provided at BHEL site by the vendor	

24	Inspection— The ordered Crane shall be inspected and load tested at	
	manufacturers' works and at BHEL site as per international norms and	
	mutually accepted quality plan, according to the load charts supplied along	
	with the offer.At site load test shall be carried out with available loads.	
25	<b>Training</b> : For each crane, necessary training for operation & maintenance	
	shall be given to two BHEL personnel free of charge for 2 weeks at	
	manufacturers works and again at site for another 2 weeks during	
	commissioning	
26	Drawing/Documentation	
	3 sets-operation and maintenance manual along with equipment part list,	
	shop manual (for bought out items)boom repair manuals are to be	
	submitted to the customer during the time of delivery of the equipment.	
27	Quality Plan	
	As per Annexure -III	

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

SL. NO.	Make of Crane	Model	Capacity (MT)	Purcha	ser's Detail	s	Purchase Order No. & Date	Date of Commissioning	Present Location	Complete Supporting Documents (attached)
				Name	Address	Phone & Fax Nos.				
1.										Yes/No.
2.										Yes/No.
3.										Yes/No.
4.										Yes/No.
5.										Yes/No.

#### NOTE:-

- 1) Contract details of Purchaser shall be furnished correctly by bidder. If it is found that contact 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) PERFORMANCE CERTIFICATE

SL.NO.	CRITERIA	OBSERVATION	REMARKS
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.	Summary of observation:		
		(SIGNATI	URE & STAMP)

**ANNEXURE -III** 

#### 7.0 QUALITY PLAN FOR CRAWLER CRANES ( ALL CAPACITIES)

#### **BIDDER SHALL FILL UP FOR COMPLIANCE)**

SL NO.	CHARACTERISTICS /ITEM	TYPE OF CHECK	INSTRUMENT	QUANTUM/ FREQUENCY OF CHECK	REFERENCE DOCUMENT/ ACCEPTANC E STANDARD	FORMAT OF RECORD	REMARKS
1	Manufacturing standard	Verificatio n	NIL	100%	Manufacturer's Standard Ref. No. & Records Maintained during various stages of manufacture.	Copy of the standard	Certificate of compliance of standard to be given by the manufacture r
2.	Bill of Material	Verificatio n	NIL	100%	Purchase Order	Purchase Order	
3.	Safety Devices:  (a) Cut off devices with alarms when exceeding permissible load moments.  (b) Safety control to stop all dangerous operations during instability  (c) Safe load indicator with visual display in operator's cabin indicating all operating parameters.  (d) Safety valve in the vent of pipe/hose rupture  (e) Protection against boom over hoisting & over lowering, and over hoisting of hoist. (hoist & boom limit switches to be provided)  (f) Drum limit switch for retaining minimum 3 layers of rope on drum  (g) Self check/error detection system  (h) Anemometer with wind velocity Indicater  (i) Electronic gradient indicator(inclinometer)  (j) Rope attachment in boom (socket/eye provision)  (k) Swing lock  (l) Guards for rotating parts	Physical checking Functional Check Physical checking	NIL	100%	Purchase Order	Joint Protocol to be signed by the vendor & BHEL Inspector	To be inspected depending upon the list of devices included in the PO/ relevant standard

4.	Inspection at no load					
	(a) All crane functions- travelling, steering, hoisting, derricking/ luffing, slewing, all horns & lights, oil pressure gauge, etc., ammeter and water temperature gauge etc. (b) All Lubrication points (c) Hook Latch provision	Functional Check			Purchase Order	Joint Protocol to be signed by the vendor & BHEL Inspector
5.	Load & Over Load Testing					
	(a) Load test to be carried out at 10% over & above the rated capacity. All crane functions – traveling, steering, hosting, derricking/ luffing, slewing, self-erection system to be checked (b) Over-load test to be carried out at 25% over & above the rates capacity	Functional Check	Required load-to be arranged by manufacturer	100%	Purchase Order	Joint Protocol to be signed by the vendor & BHEL Inspector
6	Bought out items					
7.	(a) Engine  (b) Hook Blocks (c) Wire Ropes (d) Hydraulic Pumps & Motors (e) Track Shoes Boom & Jib	Verificatio n	NIL	100%	Purchase Order	Manufacturer's test certificates and co-relation with crane serial number
7.	(a) Material Specifications	Verificatio	NIL	100%	Vendor's	
	(b) Welding Procedure  (c) Record of non destructive testing of welding i.e.Dye Penetrant testing,	verificatio n Verificatio n Verificatio n of NDT records	NIL NIL	100%	vendor's records Vendor's records Vendor's Records	
	MPI/UTI etc (d)Checking of alignment w.r.t.Tolerance limits	Verificatio n of records	NIL	100%	Vendor's records	
8	Crane documentation i.e. O&M manual, spare parts manual, bought out items manuals etc.	Verificatio n	NIL	100%	Purchase Order	

#### **ANNEXURE -IV**

#### 8.0 MAKE OF THE MAJOR COMPONENTS OF THE QUOTED CRANE

#### A. CRANE CAPACITY & MODEL:

SL. No.	Name of the Component	BHEL REQUIREMENT Make of the Component	Bidder's Offer- Specifically mention the name of the supplier with detail address	Remarks
1.	ENGINE	Cummins U.S.A./ Cummins U.K. / Caterpiller U.S.A Volvo-Germany / Volvo- Sweeden / Reputed supplier from EUROPE / AMERICA / Japan only		AUTHORISED SERVICE AGENCY IN INDIA FOR ENGINE MANUFACTURER MAY BE INDICATED
2.	MAIN PUMP OF HYDRAULIC SYSTEM	Rexroth-Germany/ Bosch- Rexroth- Germany / Reputed supplier from EUROPE / AMERICA/Japan only.		
3.	ALL OTHER PUMPS IN THE HYDRAULIC SYSTEM	Rexroth-Germany/Bosch- Rexroth-Germany / Reputed supplier from EUROPE/ AMERICA/Japan only.		
4.	ALL MOTORS USED IN THE HYDRAULIC SYSTEM (TRAVEL MOTOR/SWING MOTOR)	Rexroth Germany / Reputed supplier from ERUOPE/AMERICA/ Japan only.		
5.	WINCH MOTOR	Linde-Germany/ Reputed supplier from EUROPE/AMERICA/ Japan only.		
6.	WINCH	Reputed supplier from EUROPE/AMERICA/Japan only.		
7.	BEARINGS INCLUDING SLEW BEARING	Reputed supplier from EUROPE/AMERICA/ Japan only.		
8.	WIRE ROPES	Reputed supplier from ERUOPE/AMERICA/Japan only or Usha Martin, INDIA Only.		
9.	MAIN BOOM AND LACING PIPES	Reputed supplier from EUROPE/AMERICA/Japan only.		
10.	STEEL OF BASIC BODY OF THE CRANE (i.e. CARBODY, CABIN, CRAWLER ETC.)	Reputed supplier from EUROPE/AMERICA/ Japan only.		

#### NOTE:

- 1) THIS MAY PLEASE BE NOTED THAT MAKE OF THE ABOVE COMPONENTS AS COMMITTED BY BIDDER SHALL FORM A PART OF THE SUCCESSFUL BIDDER
- 2) DURING INSPECTON OF THE CRANE ,THE MAKE OF COMPONENTS,RELEVANT TEST CERTIFICATE FROM THE MANUFACTURER AND CO-RELATION WITH THE ACTUAL COMPONENTS USED IN THE CRANE SHALL BE CHECKED BY BHEL ENGINEER.
- 3) BIDDER MAY ALSO NOTE DURING INSPECTION NDT TEST RECORDS FOR WELDING OF BOOM ,JIB,BODYOF THE CRANE ETC. VETTED BY THIRD PARTY AGENCY OF INTERNATIONAL REPUTE SHALL BE VERIFIED.100% ULTRASONIC TESTING IS REQUIRED FOR WELDING OF MAIN FRAME BOOM & JIB,AND LATTICE PIPES ETC .NDT RECORDS SHALL BE VERIFIED (THIS SHOULD BE APPLICABLE FOR BIDDERS WHO HAVE TILL DATE MANUFACTURED LESS THAN 60 CRANES OF QUOTED OR HIGHER CAPACITY.
- 4) PROVIDE DOCUMENTARY EVIDENCE WHEREVER APPLICABLE

#### **9 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)

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.

- 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 of 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

#### **10. RATE SCHEDULE**

#### **Annexure VI**

SI. No	DESCRIPTION	QTY	UNIT PRICE
1.0	Total FOB Price including packing & forwarding, for supply of 1 number heavy lift crawler crane as per detailed specification enclosed with tender enquire and technical specifications. Including essential spares a) 6 sets of filters for Engine, (air, oil, fuel and water) and hydraulic tank and hydraulic system, b) 2 Nos Boom lattices of 6 mtr length for each size of lattices pipes used in boom section of the offered crane. Supervision charges for for assembly testing & commissioning of the cranes at the Respective BHEL sites.	1 No	
1.1	Luffing jib not less than 70Mtr to attain main boom with luffing jib combination of 130Mtr or above with all accessories such as winch, fittings and all offsets	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		

<sup>\*</sup>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)

# 11. TENDER CERTIFICATE FOR NO DEVIATION

<i>I</i> ,	Of
M/s	her
eby certify that there is no deviation from the Ter	nder conditions either
technical or commercial and I am agreeing to all	the terms and
conditions mentioned in the Tender Specification	, ,•

SIGNATURE OF THE TENDERER