



BHARAT HEAVY ELECTRICALS LIMITED
CORPORATE RESEARCH & DEVELOPMENT DIVISION
VIKASNAGAR, HYDERABAD - 500 093, INDIA

PHONES:23774494 (EXT:9804)

FAX : 91 40 23770698

RD:DP:MPX:F-04

ENQUIRY

Ref: 751402621

Date 29-10-2014

Enquiry for Supply, Installation and Commissioning of Single Lever Arm Type Creep Testing Machines.

Enquiry No:751402621

Enquiry Date : 29-10-2014

Due Date: 27-11-2014

Indicative Delivery Date : 31-07-2015

Sl.No	Item Description	Unit	Qty
1	A)Supply, Installation and Commissioning of Single-lever Arm Type Creep Testing Machines.	NO	25
2	B)Spares for Item A	SET	1
3	C) Supply, Installation and Commissioning of Single lever Arm Type Creep Testing Machines	NO	25
4	D)Spares for Item C	SET	1

Please submit your quotation for the above material in sealed cover superscribed with enquiry no, enquiry date and due date subject to our enclosed terms and conditions. The quotations shall reach us on or before the due date by 12 noon. The tenders can also be dropped in the tender box kept at the security gate,BHEL R&D. In case you are not in position to submit the offer,please send reply suitably specifying the reasons.

Sl.No	Description	Document Ref.
01	Enquiry, General Terms & Conditions, Commercial Terms & Conditions etc.	Volume - 1
02	Technical specifications, Scope of Supply etc.	Volume - 2

P Bhaskara Rao
Sr Engineer
pbrao@bhelrnd.co.in

	ENQUIRY & QUALIFYING CRITERIA	Volume - 1 Enquiry No 751402621
Supply, Installation and Commissioning of Single Lever Arm Type Creep Testing Machines.		

1	Tendor inviting officer / Authority, Designation and Address	Additional General Manager(MM) BHEL R & D, Vikas Nagar (Near Balanagar), Hyderabad -500093
2	Item Description - Qty	1) A)Supply, Installation and Commissioning of Single-lever Arm Type Creep Testing Machines. - 25 NO 2) B)Spares for Item A - 1 SET 3) C) Supply, Installation and Commissioning of Single lever Arm Type Creep Testing Machines - 25 NO 4) D)Spares for Item C - 1 SET
3	Enquiry Reference no.	751402621
4	Indicative Delivery Date	31-07-2015
5	Due date, Time and place for submission of tender	27-11-2014 upto 12 noon. Sealed Quotations shall be addressed to AGM(MM), BHEL R & D Division, Vikas Nagar (Near Balanagar), Hyderabad AP,India Pin - 500 093 Quotations can also be deposited in the Tender box located at Security Gate of BHEL R & D BHEL shall not be responsible for any postal/courier delay.
6	Place, Date and time of Tech.Bid opening	Tender Opening Cell (Sangam) BHEL R & D Office. 27-11-2014, 2 PM
7	Mode of Submission of Tender	Please submit your offer in one common sealed cover containing two parts in separate sealed covers as detailed below. 1. First Cover shall contain: a. Technical & Commercial bid. b. Filled in commercial complaince statement(mandatory) c. Copy of Price-bid with price(s) cells blank (un-priced price bid) 2. Second cover shall contain Price Bid. Price Bid Containing Price quotes, installation and/or commissioning charges shall be spelt out clearly taking into account total charges rather than quoting vaguely such as charges per man-day or charges per engineer per day etc. If the price bid was found later to be different from the unpriced pricebid format in any way, the offer will be rejected summarily. The rates shall be quoted both in figures and in words. The offers can also be submitted through e-mail and have to be sent in PDF

format (files with PDF extension only). Files having extensions other than PDF like RAR, EXE, JPEG etc. and with external links will not be considered. They have to be sent to e-mail id: 'eoffers@bhelrnd.co.in' only. Copies should not be marked to anyone. If the offers are marked to anyone other than to eoffers, their offer will not be considered.

The e-mail offers should have two attachments. One attachment shall contain a) Technical & Commercial bid b) Filled in Commercial Compliance Statement (mandatory) and c) Copy of price bid with price(s) cells blank (un-priced price bid). The second attachment shall contain price bid.

The subject of the e-mail should contain Enquiry No, Enquiry Date and Due date.



GENERAL TERMS & CONDITIONS (GTC)

Volume - 1
Enquiry No
751402621


Supply, Installation and Commissioning of Single Lever Arm Type Creep Testing Machines.

SL.No.	Clause	BHEL REQUIREMENT
1	Foreign Suppliers	<p>BHEL will deal directly with foreign vendors, where ever required, for procurement of goods. However, if the foreign principal desires to avail of services of an Indian agent, then foreign principal should ensure compliance to regulatory guidelines which require mandatory submission of agency agreement containing agency commission.</p> <p>Any supplier (Agents/distributors/representatives) desirous of quoting imported goods/services, they should submit the quote in foreign currency along with agency agreement copy, failing which their offer is liable for rejection. In case of non submission of agency agreement copy, the principal should submit the quotation to BHEL directly. Foreign supplier will also indicate in their offer Indian agent's name, if any, address and percentage of agency commission out of the quoted price.</p> <p>Fully owned Indian Subsidiaries/distributors of Foreign Companies shall quote in Foreign Currency on FOB basis only.</p>
2	Late Tenders	Tenders received after due date/time(12:00hrs) will not be considered
3	Discrepancy in words and figures	<p>(a) If, in the price structure quoted for the required goods/ Services/ works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.</p> <p>(b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and</p> <p>(c). If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above.</p> <p>(d) If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date upto which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.</p>
4	Two Part bid clarifications	In the case of Two-part bid, the vendor should furnish technical and commercial clarifications, if any, within stipulated time mentioned, failing which, it will be construed that the vendor is not interested in the tender and BHEL shall not consider the offer for further evaluation.
5	Price Impacts	In the event of any bidder, after finalizing the technical specifications and scope of supply, opting to revise their original bid, they have to submit the Price-Impact only. The Original price bid along with Price-Impact bid shall be opened during price bid opening. Unsolicited price impacts will not be considered.
		All offers in price bid opening or reverse auction shall be evaluated in Indian currency based on unit price, packing & forwarding, taxes/duties, freight charges if any, exchange rate. Loading due to non-acceptance of our standard commercial

6	Price bid evaluation	terms will be evaluated as per the LOADING FACTORS form as enclosed along with the enquiry.The exchange rate declared by State Bank of India under TT Selling rate on the technical bid open date shall be adopted for evaluating foreign currency bids.
7	Packing	The supplier shall be responsible for the goods being properly and adequately packed so as to prevent any loss, damage or deterioration during transit.
8	Withdrawal	In case the supplier withdraws their offer before placement of order, BHEL reserves the right not to send next enquiry(ies). In case the supplier withdraws the quotation after its acceptance by BHEL or fails to supply the goods as per the terms and conditions of contract, or at any time repudiated the contract wholly or in part, BHEL shall be at liberty to cancel the Purchase Order and to recover from the supplier the extra cost and other loss,incidentals due to the breach of contract on the part of the supplier through risk purchase.
9	Risk Purchase	In case of default/late delivery,BHEL reserves the right to make alternate arrangement for procurement at suppliers risk and cost.
10	Banned List	The offers of the bidders who are in the banned list and the offers of the bidders who engage the services of the banned firms, shall be rejected.The list of banned firms is available on BHEL website www.bhel.com.
11	Over All L1	Order will be placed on overall L1 basis. Vendors should quote for all items, otherwise the offer will be rejected.
12	Additional Information	Suppliers are requested to visit our web site regularly for any updates and additional information, "All corrigenda, addenda, amendments, time extensions clarifications, etc. to the tender will be hosted on BHEL website only". The corrigendum will not be published in news paper.
13	Destination	Indian Vendors: Destination shall be Stores,BHEL R&D,Hyderabad. Foreign Vendors: 1) BHEL R.O.D Office, Mumbai, India for sea consignments and 2) BHEL R&D, Hyderabad, India for air consignments.
14	Arbitration	Subject to the jurisdiction of Hyderabad/Secunderabad,Andhra Pradesh,India in respect of any suit or other legal proceedings relating this contract.
		<p>In case the supplier belongs to MSEs (Micro Small Enterprises), Registration copy in this respect shall be submitted along with the offer.Further if MSEs are owned by the Scheduled Caste or the Scheduled Tribe entrepreneurs the same may be intimated.</p> <p>The following are the benefits for the MSEs.</p> <p>1.MSEs are given tender documents free of cost and are exempted from payment of earnest money (EMD).</p> <p>2.In tender, participating MSEs quoting price within price band of L1+15% shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a MSE and such MSE shall be allowed to supply up to 20% of total tendered value. In case of more than one such MSE, the supply shall be shared proportionately.</p> <p>MSE suppliers can avail the intended benefits only if they submit along with offer, attested copies of either EM II certificate having deemed validity (Two years from the date of issue of acknowledgement in EM-II) or valid NSIC certificate or EM II certificate along with CA certificate (Format as below)applicable for the year,</p>

15	Micro Small Enterprises (MSEs)	<p>certifying quantum of investment in plant and machinery within the permissible limit as per the act for relevant status (Micro or small) Where the deemed validity of EM II is over. Date to be reckoned for determining the deemed validity will be the last date of technical bid submission. Non submission of such documents will lead to consideration of their bids at par with other bidders and MSE status of such suppliers shall be shifted to Non MSE supplier till the supplier submits these documents.</p> <p style="text-align: center;">Certificate by chartered Accountant on letter head</p> <p>This is to certify that M/s, (hereinafter referred to as 'company') having its registered office at is registered under MSMED Act 2006, (Entrepreneur Memorandum No(Part-II) dtd:....., Category:.....(Micro/Small). (Copy enclosed). Further verified from the Books of Accounts that the investment of the company as on date..... as per MSMED Act 2006 is as follows :</p> <ol style="list-style-type: none"> 1. For manufacturing Enterprises : Investment in plant and machinery (i.e. Original cost excluding land and building and the items specified by the ministry of small Scale Industries vide its notification No.S.O.1722(E) dated October 5, 2006. 2. For Service Enterprises : Investment in equipment (Original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006: Rs..... Lacs <p>The above investment of Rs..... Lacs is within permissible limit of Rs..... Lacs forMicro/Small (Strike off which is not applicable) Category under MSMED Act 2006.</p> <p>Date:</p> <p>(Signature) Name- Membership number – Seal of Chartered Accountant</p>
16	Inspection	On receipt, the goods shall be subjected to inspection and our decision regarding the acceptability of the goods shall be final and binding on the suppliers.

Signature of the bidder with Seal & Date

	COMMERCIAL TERMS & CONDITIONS (CTC)	Volume - 1 Enquiry No 751402621
Supply, Installation and Commissioning of Single Lever Arm Type Creep Testing Machines.		

SL.No.	Clause	BHEL REQUIREMENT	SUPPLIERS ACCEPTANCE / REMARKS
1	Reverse Auction	<p>BHEL reserves the right to go for Reverse Auction (RA) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. All bidders to give their acceptance for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.</p> <p>In case BHEL decides to go for Reverse Auction, only those bidders who have given their acceptance to participate in RA will be allowed to participate in the Reverse Auction. Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit „online sealed bid“ in the Reverse Auction. Non-submission of „online sealed bid“ by the bidder will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.</p>	
2	Weight and Packing Dimensions.	The Supplier shall indicate the shipping weight (Kgs) and dimensions(L x W x H in cms) clearly along with offer.	
3	Validity of Offer	90 days from date of techno-commercial bid opening.	
4	LD Clause	Failure to supply the goods and/or carryout the services within the stipulated delivery date will attract a penalty of 0.5% per week or part thereof for the value of the undelivered portion of the purchase order subject to a maximum of 10% of the total order value. In case of non acceptance to this LD Clause, 10% of basic material cost will be loaded on the quoted prices while cost comparison. (Please refer the enclosed 'Loading Factors' sheet).	
5	PBG	PBG of 10% of total order value is to be submitted by the successful vendor and shall be kept valid upto guarantee period with additional claim period of 2 months there after. The offers of the suppliers not accepting to this clause will be rejected.	
6	Freight & Insurance	Insurance will be arranged by BHEL in case of FCA / FOB basis supplies. In such cases ,an amount of 3% towards freight and insurance will be added for cost comparison.	
	Agency	<p>Guidelines regarding dealing with Indian agents of foreign suppliers</p> <ol style="list-style-type: none"> 1. BHEL shall deal directly with foreign vendors, wherever required, for procurement of goods. However, if the foreign principal desires to avail of services of an Indian agent, then the foreign principal should ensure compliance to regulatory guidelines which require mandatory submission of agency agreement. 2. It shall be incumbent on the Indian agent and the foreign principal to adhere to the relevant guidelines of government of India, issued from time to time. 3. The agency agreement should specify the precise relationship between the foreign oem and services to be rendered by agent / associate, whether general in nature or in 	

7	Agreement	<p>relation to the particular contract, must clearly stated by the foreign supplier / Indian agent. Any payment, which the agent / associate receives in India or abroad from the oem, whether as commission or as a general retainer fee shall be brought out in record in the agreement and be made explicit in order to encurse compliance to the laws of the country.</p> <p>4. Any agency commission to be paid by BHEL to the Indian agent shall be Indian currency.</p> <p>5. When ever Indian agents are representing on behalf of their principals, the relevant authorization letter and agreement copy to be enclosed along with technical bid to consider the offer.</p>	
8	Delivery Period	<p><u>FOR INDIAN SUPPLIES :</u></p> <p>Suppliers are requested to quote for the delivery mentioned in the enquiry. However, in case it is not possible to meet the delivery requirement of BHEL, they shall mention in the right column the best possible delivery period</p> <p>1) From date of Purchase order =====></p> <p>2) From receipt of material / input data / drawings etc. from BHEL=====> (if applicable)</p> <p>3) From receipt of approval of design documents / drawings etc. by BHEL=====> (if applicable)</p> <p>4) Time from PDI to despatch =====> (if applicable)</p> <p>However BHEL shall inform the vendor about rejection of the offer before price bid opening in case of not meeting the delivery requirements of BHEL.</p> <hr/> <p><u>FOR FOREIGN SUPPLIES :</u></p> <p>Suppliers are requested to quote for the delivery mentioned in the enquiry. However, in case it is not possible to meet the delivery requirement of BHEL, they shall mention in the right column the best possible delivery period</p> <p>1. From date of Purchase order :=====></p> <p>2. From receipt of input data / drawings etc. from BHEL=====> (if applicable)</p> <p>3. From receipt of approval of design documents / drawings etc. by BHEL =====> (if applicable)</p> <p>4. From date of LC Opening=====> (if applicable)</p>	

		<p>5. From date of PO acceptance =====> (wherever issues like export clearance etc. are involved, mentioning the reasons)</p> <p>However BHEL shall inform the vendor about rejection of the offer before price bid opening in case of not meeting the delivery requirements of BHEL.</p>	
9	Payment Terms	<p>Payment</p> <p>1) Through L/C:Please note Payment through Letter of Credit (L/C) is for foreign currency payments only. Where the payments are through L/C (L/C opening charges shall be loaded for landed cost evaluation), payment of Supply value shall be 80% on dispatch and 20% on issue of E&C Certificate. Payment of E&C Value shall be made against E&C certificate issued by BHEL. E&C certificate shall be issued on satisfactory completion of erection, commissioning, job proving, performance test, training to operators etc, as envisaged in PO. The L/C shall be opened by BHEL as per following: (i) With in 30 days of receipt of order acceptance, an irrevocable unconfirmed L/C will be opened for 30% of the payment towards supply, due on shipment i.e. 24% of the Supply value of PO (30% of 80%) Not earlier than 60 days before the shipment date, the value of this irrevocable unconfirmed L/C would be enhanced from 24% to 80% of the Supply value of PO The above L/C can be negotiated after the Shipment against submission of B/L or AWB and such other documents as mentioned in the in the PO. The above L/C will be valid for a period extending 21 days beyond the shipment date for negotiation of documents. (ii)15 days prior to the scheduled &confirmed arrival of the technicians of supplier with their names, an irrevocable unconfirmed L/C will be opened for a value equal to 20% of the Supply value of PO plus 100% of the E&C value of PO. The validity of L/C would be sufficient to cover the period required for the completion of E&C plus 21 days as negotiation period. This L/C can be negotiated after: (a) Completion of E&C of the equipment in BHEL and against E&C certificate issued by BHEL and (b) Submission of Performance Bank Guarantee (PBG) by Supplier in the prescribed Format valid for 60 days beyond the warranty period, from one of the Consortium Banks of BHEL or from a reputed Bank and confirmed by Consortium Bank of BHEL for 10% of total PO Value. The PBG confirmation charges shall be borne by vendor.</p> <p>2 Direct Payment (foreign and Indian Suppliers): In case of direct payment , 80% payment of Supply value shall be made with in 45 days form the date of receipt of material at BHEL. Balance 20% of supply value plus 100% of the E&C portion of PO Value will be paid against E&C certificate issued by BHEL and submission of Performance Bank Guarantee (PBG) valid for 30 days beyond the warranty period by Supplier from any of the Consortium Banks of BHEL for 10% of total PO Value in the prescribed Format. The PBG confirmation charges shall be borne by vendor.</p> <p>3. Bank Guarantee and Loading against non acceptance of BHEL,s Payment Terms: If payment terms as mentioned by BHEL are not agreed by bidder, such bidder have to submit Bank Guarantee at the time of payment/opening of LC in the prescribed Format of the amount, exceeding 80% of the PO value, valid till issue of E&C Certificate for the equipment. However, in no case, payment against dispatch shall exceed 90% of the PO Value.</p>	

		<p>Additionally, for any deviation sought including as mentioned above, in Payment Terms by bidder w.r.t. tender conditions, following loading shall be followed:</p> <p>(A) Benchmark Prime Lending Rate(BPLR)of SBI as applicable on the date of tender opening +2%, for the amount & period of relaxation sought by bidder.</p> <p>(B) On account of payment through LC if insisted by bidder , bank charges shall also be loaded for the deviation in (i) opening of LC by BHEL and (ii) period and amount of LC as per prevailing bank rates.</p>	
10	E&C	Supplier to quote Supply and E&C portion with relevant taxes and time requirement seperately.BHEL reserves the right to issue two seperate orders.	

Note : All the clauses of the above format should be filled and submitted with the Techno Commercial Bid (Part-1). The filled in BHEL Commercial terms & Conditions format submitted with technical bid, responding to all the clauses duly signed with seal **only shall be considered**. Any other Commercial terms & conditions of bidders entered else where in their offer shall not be considered and are liable for rejection.

Signature of the bidder with Seal & Date



OTHER TERMS & CONDITIONS

Volume - 1
Enquiry No
751402621

Supply, Installation and Commissioning of Single Lever Arm Type Creep Testing Machines.

SL.No.	Clause	BHEL REQUIREMENT	SUPPLIERS ACCEPTANCE / REMARKS
1	Two separate orders	BHEL reserve the right to place Two separate orders place on the vendor of the lowest cost (L1) offer to BHEL. a) One order for 25 Nos. of Supply, Installation and Commissioning of Single-lever Arm Type Creep Testing Machines to BHEL R&D, Hyderabad, India as per Item Sl. No. 1 &2. b) Another order for 25 Nos. of Supply, Installation and Commissioning of Single-lever Arm Type Creep Testing Machines to NETRA, NTPC Ltd., Greater Noida, India as per Item Sl. No. 3 &4.	
2	General	I. For supply to BHEL R&D (Item Sl. No. 1 & 2) a) All offers must include name of the contact person, phone no/mobile no, Fax no, email-id. Unsigned offers are liable for rejection. b) We, BHEL R&D, is registered with Department of Scientific and Industrial Research (DSIR) for the purpose of availing Customs Duty exemption in terms of Government Notification no.24/2007-Customs dated 01-Mar-2007 & Central Excise Duty Exemption in terms of Government Notification No. 16/2007-Central Excise dated 01-Mar-2007 as amended from time to time. Hence suppliers are requested to submit their bids clearly stating applicable taxes/duties. All foreign quotes will be evaluated with custom duty @ 5.15% for cost comparison. c) Taxes & Duties quoted will be taken for evaluation of landed cost & order placement and no change will be entertained later except in the case of changes made by the government. However please note that we are availing cenvat credit for service tax and hence service tax will be excluded in calculation of landed cost to BHEL. In case any Taxes/ Duties exempted, a self-declaration for the same may be attached to the offer. Changes in taxes and duties because of the changes in turn over etc will be to supplier's account. d) Where ever vendor registration form and EFT details have been	

		submitted earlier, the same need not be submitted again unless there is a change. e) BHEL R&D do not issue 'C' form. f) L1 status shall be decided on Cost to BHEL Basis. II. For supply to NETRA, NTPC Ltd., Greater Noida, India (Item Sl. No. 3 &4) offers will be evaluated as per actual applicable taxes	
3	Prices basis	The prices shall be firm for entire period of contract. The suppliers shall indicate packing and forwarding charges, if any, separately. All foreign suppliers shall quote the lowest prices on 'FOB-Nearest International Sea port' basis. An amount of 3% on basic value towards freight and insurance will be added for cost comparison. All Indian suppliers shall quote the lowest prices on 'free delivery at BHEL R&D Stores' for Item Sl. No. 1&2 and "free delivery at Mechanical Metallurgy Department, NETRA, NTPC Ltd., E-3, Ecotech II, Udyog Vihar, Greater Noida – 201 306, India:" basis only.	
4	AMC	AMC charges to be quoted as a percentage of basic equipment cost for a period of 3 years on completion of standard warranty. The AMC payment will be made on completion of each half year period duly certified by competent authority and within 45 days against submission of invoice. Please indicate taxes applicable for AMC. The AMC charges will be added to equipment cost while arriving lowest bidder of the tender. BHEL reserve the right to issue AMC order before completion of standard warranty.	
5	Implementation of Integrity Pact (IP)	To oversee implementation of Integrity Pact (IP), Sri V.V.R Sastry has been nominated by BHEL as Independent External Monitor (IEM). The contact details of Sri V.V.R Sastry is 957, 9thMain, 3 Stage, 3Block, Basaveswaranagar, Banaglore - 560079 and the e-mail id is sastry@gmail.com. The prospective bidders have to sign and stamp the attached Integrity Pact document and to be submitted along with the technical bid.	

Signature of the bidder with Seal & Date



ITEM SPECIFICATIONS

Volume - 2
Enquiry NO
751402621

Supply, Installation and Commissioning of Single Lever Arm Type Creep Testing Machines.

SL.No.	Item			
1	A)Supply, Installation and Commissioning of Single-lever Arm Type Creep Testing Machines.			
	sl no	Descriptions	BHEL Specifications	Vendor Specifications/ Deviations
		BHEL Specifications		
		Supply, installation and commissioning of single-lever type creep test machines for testing in air environment in accordance with ASTM E139 testing standard with the following features.		
	1	General Features		
	I	Machine	The machine includes a loading frame with an integral control cabinet.	
	II	Capacity	Capacity of the machine shall be in the range of 50-70 kN. Load will be applied to the specimen through a single-lever arm with lever ratio of 20:1 and with a load accuracy of +/- 0.5 % or better.	
	III	Furnace	The machine should be equipped with a three zone furnace to carry out the tests at high temperatures in the range 500 Deg C to 1100 Deg C with an accuracy of +/- 2 Deg C. High precision, high accuracy temperature controller and power control unit are to be employed to achieve the above mentioned temperature accuracy over a length of 150 mm. each zone should be controlled by separate temperature controller and power supply unit.	
	IV	Automatic Load Lever Beam	Automatic load lever beam leveling device with over travel	

	Device	trips is required.	
V	Strain Measurement System	The specimen elongation (strain) has to be measured by an attachment of extensometer and digital dial gauge during the test continuously.	
VI	Data Storage	Continuous temperature and strain measurements, and also storage and analyses of data are required through computer controlled data acquisition system.	
VII	Time Indication	It is required to indicate the elapsed test time by a digital time meter with a zero hour to a full scale reading of 99999 hours, with a resolution of 0.1 hour. The digital meter shall have provision for manual reset to zero hour and with a memory at power break.	
VIII	Automatic Shutdown	There must be a provision to automatically shut off the electrical power to the machine when the specimen breaks.	
IX	Operating Power	The operating power for the whole control cabinet and the furnace should be of 230 volts single phase 50 Hz ± 2 Hz/ 220Volts ± 10 Volts.	
X	Switches	The main switch and the other switches for temperature controllers, elevator motors etc. must be provided with suitable good quality circuit breaker for the safety reasons.	
XI	Neon Light System	A good quality of bright neon pilot light should be used wherever required	
XII	Fuses	Fuses should be used wherever required and the fuse points shall be easily accessible.	
XIII	Spirit Level	Spirit level should be mounted on top of lever arm in each machine, so that the horizontal	

		position of the beam can be confirmed periodically.	
XIV	Power Off Facility	Provision should be there to put off the power to the furnace, in case of overshooting of temperature due to malfunctioning of any of the temperature controllers.	
2	Load Frame		
I	Capacity	Capacity of the machine shall be 50-70 kN. Load will be applied to the specimen through a single-lever arm made from solid block with lever ratio of 20:1 and with a load accuracy of +/- 0.5 % or better. Fulcrum material should be high strength tool steel (HSS).	
II	Floor Space Criteria	Free standing load frame features a small footprint that optimizes laboratory floor space.	
III	Automatic Load Lever Beam Device	Automatic load lever beam leveling device with over travel trips is required.	
IV	Foundation	Design of the machine is such that it requires no special foundation.	
V	Vibration Isolation	There should be provision for vibration isolation with neoprene waffle pads.	
VI	Frame Material	The material for the frame shall be stainless steel AISI316 or better. All the components should be painted with three coats of epoxy paint and finally coated with approved colour	
VII	Spirit Level	Provision of spirit level to indicate beam position.	
3	Motorized Draw Head Assembly to maintain lever horizontality		
		Provision should be made to prevent the draw head assembly	

I	Limit Provision	from exceeding the limits during manual or automatic operations.	
II	Manual Operation	There must be a provision to manually operate the draw head motor (i.e. the motor and gear assembly which supports the creep specimen train) electrically to move it up or down. During the test, it should be ensured the draw head motor moves down automatically by the above said beam-leveling unit.	
III	De Clutching of Motor	There must be a provision to de-clutch the motor assembly from the gear assembly so that the specimen train assembly can be moved up or down manually by hand wheel.	
IV	Gear Drive Jack	Precise, anti-rotation worm gear drive jack with at least 100 mm linear travel and powered by a gear reduced high torque motor.	
V	Coupling	Flexible coupling for stable, no-jitter continuous draw head motion.	
VI	Proximity Switch	Proximity switch for non-contact sensing of lever arm position. (This provides auto-leveling control and prevents damage when the specimen fails.)	
4	Furnace		
I	Description	Three-zone vertical cylindrical furnace should be of split type and hinged in the rear side. Other end should have provision for locking at top and bottom using CAMLOC type of assembly or equivalent.	
II	Power Supply	The power supply terminals to the furnace should be kept near the hinges i.e. in the rear side of the furnace with the suitable protective covers.	

III	Heating Element	<ul style="list-style-type: none"> • Kanthal - A1 • Max. Temperature: 1100 Deg C • Operating Voltage: 230 V AC single phase 50 Hz \pm2 Hz/ 220Volts \pm10 Volts. 	
IV	Insulation	Top and bottom finish insulation should be low thermal conducting (low 'K' factor) vacuum cast ceramic fiber insulation to provide minimum heat loss, high temperature capability and for rigid structure.	
V	Outer Shell Body	The outer shell should be made by a bright stainless steel 1.6 mm thick or above. It is preferable to avoid using flanges. Closures at top and bottom of the furnace should fit snugly around pull bars and reduce the heat loss at these points. Provisions must be there to seal the top and bottom of the furnace by the compressed vacuum cast ceramic fiber insulation. Clamps or equivalent can be provided to keep the tight fitting of the above thermal insulation boards to seal the leakages	
VI	Dimensions	<ul style="list-style-type: none"> • Outer Diameter: 250 mm or above • Inner Diameter: 90 mm or above • Height: 400 mm or above. 	
VII	Temperature Zones	Uniform temperature zone (\pm 2 Deg C) at the middle of the furnace should be at least 150 mm.	
VIII	Temperature Controllers	Separate temperature controllers with power supply unit should be employed to control the temperature of each zone.	
IX	Position	The rear-hinged part of the furnace should be mounted on the machine frame such that the position of the furnace is adjustable vertically over a	

		distance of double of the furnace height.	
X	Algorithm for Temperature Control	Integrated, sophisticated control-Algorithm for a precise temperature control along specimen and to prevent overshooting temperature.	
XI	Temperature Control Settings	Automatic temperature control setting from 50 Deg C to 1100 Deg C.	
XII	Thermocouples	Interface for 4 Thermocouples (3 for 3 zones of furnace , 1 for over temperature protection)	
XIII	Display	Digital display of temperature.	
5	PID Temperature controller:		
I	Input		
a	Temperature Range	50 Deg C – 1100 Deg C	
b	Input Range	+/- 100 mV and 0 to 10 V dc (auto ranging)	
c	Sample Rate	9 Hz (110 ms)	
d	Calibration accuracy	0.25% of reading, +/- 1 LSD, +/- 1 Deg C/F	
e	Resolution	< 1 micro V for +/- 100 mV range, < 0.2 mV for 10 V dc range	
f	Linearization accuracy	< 1.0 of reading	
g	Input filter	1.0 to 999.9 seconds	
h	Zero filter	To be available	
II	Thermocouple	R- Type	
a	Cold junction compensation	Automatic	
b	Thermocouple break protection	To be available	
c	Output	Relay output and control output (4-20 mA)	
III	Control Functions		
a	Modes	PID or PI with overshoot inhibition, PD, PI, P only on/off	
b	Application	Heating and cooling	
c			

	Auto/manual	Bump less transfer	
d	Set point rate limit	0.01 to 99.99 degrees or display units per minute	
e	Cooling algorithms	Linear	
f	Tuning: One-shot tune	Automatic calculation of PID and overshoot inhibition parameters	
g	Automatic droop compensation	Automatic calculation of manual reset value when using PD control	
h	Alarm types	Full scale high or low, deviation high, low, or band	
IV	General		
a	Display	Dual, 4 digit x 7 segment high intensity LED	
b	Dimensions	48 x 48 x 103 mm (width, height and depth respectively)	
c	Supply	230 V AC / 220Volts \pm 10 Volts, 50 Hz \pm 2 Hz, 5 Watts max	
d	Temperature and RH	0 to 55 Deg C RH: 5 to 90% non-condensing	
e	Panel sealing	IP65	
f	Non-volatile EERPOM	To be available	
6	Thyristor Power Control Units:		
a	Load type	Constant resistance	
b	Power supply	230 V AC single phase 50 Hz \pm 2 Hz/ 220Volts \pm 10 Volts.	
c	Heater voltage	230 V AC	
d	AC current rating	15 A	
e	Firing mode	Phase angle	
f	Input	4-20 mA DC	
g	Manual input	Input impedance 330 kilo ohms	
h	Slave output	+10 V	
i	Operating temperature	Upto 50 Deg C	
j	Mounting	Din Mounting	
k	Current limit	Adjusted from 10 to 100%	

l	Compatibility	Should be compatible with the above temperature controller	
m	Thyristor protection	1. External High speed fuse 2. Internal RC snubber	
7	Pull Rods, Universal coupling, Grips, Adapter and Fixtures		
I	Pull Rods	Pull rods made of nickel-base superalloy grade MAR M 246/247 or equivalent material like IN 718/713 super alloys having durability greater than 3 years at full load and at a temperature upto 1100 Deg C.	
II	Fixtures	System shall have suitable fixtures to avoid bending and eccentricity	
III	Material for Adapters	Specimen adapters as per ASTM specification made of nickel-base superalloy grade MAR M 246/247 or equivalent material like IN718/713 super alloys to adopt specimen having M10x1.5, M8 X 1.25 threading and flat adaptors for flat specimens of 2 mm (one pair of each size per machine).	
IV	Drawings	Drawings of the M10, M8 round sample and Flat sample are attached.	
V	Standard	Pull Rods, Universal coupling, Grips, Adapter and Fixtures should provide perfect axial alignment according to the ASTM E 292 standard.	
VI	Thermocouple Wire	Thermocouple wire: R-type thermocouples (1 meter length) with standard colour coded connectors (6 nos. per frame)	
8	Weights (1 set for Each Frame)		
I	Description	Weights of denominations of 150 N, 100 N, 50 N, 25 N, 5 N and 2.5 N should be supplied as quantity mentioned in the table below for each machine. The material for the weight is IS 226	

		MS, weights should be calibrated and should be painted with three coats of epoxy paint and finally coated with approved colour.	
II	Quantity and Numbers	Weight (N) Quantity (Numbers) 150 N-- 7 Nos 100 N -- 10 Nos 50 N-- 2 Nos 25 N-- 2 Nos 5 N-- 4 Nos 2.5N -- 2 Nos	
9	Extensometer (One number with each machine)		
I	Description	Extensometer should be of 4-rod type with provision for single elongation measuring instrument (Digimatic indicator). Materials of the extensometer should be nickel base superalloy to work upto 1100 Deg C	
10	Strain Measuring Instruments (2 sets for each frame)		
I	Description	High Precision, high Accuracy LVDT or linear encoder offering long term stability for creep tests running up to 33000h (typical)	
II	Service Temperature	Service temperature 10 to 40 deg C – transducer construction material should with stand this temperature without affecting the precision and accuracy.	
III	Type	Digimatic indicator (Mitutoyo / Heidenhain/ Schlumberger make or equivalent) with the following features. I. Inductive Spring loaded type. II. Stroke: +/- 12.5 mm (Typical) or +/- 5.0 mm III. Least +/- 1 micron (0.001 mm) or better upto 0.1 micron . V. Data output: compatible with data logging system.	
11	Data Logging System		
		Computerized data logging system for logging data for 3	

I	Description	<p>temperature channels and 2 displacement transducer channels from each machine and storing of data for minimum 6 month (all channels data from 20 machines) Variable data scanning speed and recording speed is required (typically user selectable range starting from 1 min with user input) Scanning speed and recording speed in each channel should be independently altered (Not in a group of machine in a particular scanning / recording speed Data reduction automatic and suitable for long term creep test data (max. 33000 h) Alignment check (cold run) manual step loading (hot run) and test process data logging and storage, display for creep test analysis purpose Real time continuous display of all temperature and displacement channels for each machine Provision should be there for easy upload of the data periodically to a computer for spread sheet applications Online Creep curve plot progress for each machine Software should have graphing and reporting functions both for online progress and post test stages. Suitable computer and display monitor with latest available hardware configuration to use the software for creep test data logging and processed data plot and data analysis for creep test. Protection of the test control data and logged test output data in the event of computer failure 3 data logger system or as suitable for 25 Nos of Machines</p>	
		<p>a) Operating system: MS Windows-7 or above b) Processor: 2.8 GHz or higher c) RAM : 4 GB or higher d) USB</p>	

II	Computer Specifications (3 Computer System)	<p>keyboard and mouse with Colour Laser Jet Printer (Size: A4)& Scanner (Flat Bed Type) e) Hard drive: 1 TB or higher f) DVD drive g) Software: MS Office latest edition h) Network interface: Integrated 10/100 (higher) Ethernet i) Data interface card to acquire displacement/load data with time User-friendly software package to run creep and other facility through software, data acquisition and analysis</p>	
12	Calibrated Load-Cell Unit	One calibrated load cell having 100 KN capacity has to be supplied.	
13	Calibration Certificates	<p>I. Calibration certificate for all digital and non-digital instruments and probes to be used. II. Verification certificate for creep testing machine. III. The following devices should be calibrated against standards traced to the National Institute of Standards and Technology. Applicable ASTM standards are listed beside the device. • Load measuring system Practice E4 and E74 • Extensometer Practice E83 • Thermocouples Method E 220 • Load Cell, Digimatic Indication and Temperature measuring device, and weights also should be verified.</p>	
14	Power failure protection	Each frame should have the provision to protect the data and retain the control of the data in the event of power failure. Test should resume on power resumption. Suitable UPS system of APC make or better should also be arranged by the vendor including erection and commissioning. Data protection in the event of computer failure is essential.	
15			

	Quantity	25 Nos	
16	Others	Three (3) hard copies and soft copy in a CD of the detailed user manual, complete with circuit diagrams (mechanical, electronic and electrical), operational features, calibration certificates. Installation diskettes/CDs for the PC and softwares shall be supplied along with the equipment. All future upgrade possibilities to the present software have to be indicated and ensured till the useful life of the equipment	
2	B)Spares for Item A		
sl no	Descriptions	BHEL Specifications	Vendor Specifications/ Deviations
	Spares for Single Lever Type Creep Testing Machines		
	Spares for 25 Nos of Machines		
I	Load train assembly	Load train assembly (Pull rods, Universal coupling, Grips, Adapter and Fixtures) - Quantity 6Nos.	
II	PID Temperature controller	PID Temperature controller – 9 Nos.	
III	Thyristor Power Control Units	Thyristor Power Control Units - 9 Nos.	
IV	Rod Type Extensometer	Rod Type Extensometer – 12 Nos.	
V	Displacement Measurement System /Digimatic indicator	Displacement Measurement System /Digimatic indicator - 12 Nos.	
VI	Beam leveling motors with gear assembly	Beam leveling motors with gear assembly – 2 Nos.	
VII	Beam leveling sensors	Beam leveling sensors – 3 Nos.	
VIII	Creep Furnaces	10 Nos of Creep furnaces in ready to install condition	
IX	Tube Adopters	Special adaptors for the tube test of tube sizes 1. 44.5 x 3 mm 2. 47.63 x 3 mm 3. 51 x 4 mm 4. 54 x 4 mm 5. 63.5 x 6.3 mm	

		6. 63.5 x 12.5 mm Dual mounting arrangement of Digimatic for tube testing---- 5 sets	
X	Data Logger System	1 No of Data Logger System required as spares.	
XI	Creep Furnace Control panel	3 Nos	
XII	Adaptors / Grippers for Tensile Specimens	3 set for M10 & 3 set for M8	
XIII	Adaptors for Flat Samples with thickness 2 to 9 mm	5 sets	
3	C) Supply, Installation and Commissioning of Single lever Arm Type Creep Testing Machines		
sl no	Descriptions	BHEL Specifications	Vendor Specifications/ Deviations
1	Supply, installation and commissioning of single-lever type creep test machines for testing in air environment in accordance with ASTM E139 testing standard with the following features.	As per the specifications provided in Section 'A' Extra Adaptors to be given with each machines, which are as follows: 1. M16 x 2 – one set 2. For flat adaptor: 0-5 mm – one set 3. For flat adaptor: 5-10 mm – one set 4. For flat adaptor: 10-20 mm – one set	
2	Delivery	These 25 nos of Creep machines to be delivered at: Mechanical Metallurgy Department, NETRA, NTPC Ltd., E-3, Ecotech II, Udyog Vihar, Greater Noida-201306 Contact Persons: 1. Mr P K Jain, General Manager (NETRA), email: pkjain@ntpc.co.in, Mob: 09650992921 2. Mr Rajesh Daga, AGM (NETRA), email: daga.raj@ntpc.co.in, Mob: 09650992170	
3	PDI & Training	PDI and Training for the 25 machines being procured for NTPC shall be carried out by NTPC personnel	
4	D) Spares for Item C		
sl no	Descriptions	BHEL Specifications	Vendor Specifications/ Deviations
1	Spares	Spares as described in para B are to be supplied for NTPC	

		machines also.	
2	Weights	Additionally the following quantity of weights for each of 25 Nos of NTPC Creep Machines also to be supplied. 100g - 4 nos 50g - 2 nos 20g - 2 nos 10g - 2 nos	
G			
General Specifications			
sl no	Descriptions	BHEL Specifications	Vendor Specifications/ Deviations
	General Specifications for Supply, Installation and Commissioning of single-lever type creep testing machine.		
I	Prequalification Requirements	A) The financial turnover of the company/firm/vendor/organization in the previous financial year should be minimum one fourth of the total order value. B) The firm/Company/Vendor/Organization should have supplied 10 similar creep machines to a single customer in a single purchase order during the last 5 years in india or abroad and proof of supply and complete installation to be provided. C) Firm/Company/Vendor/Organization should have been in the business at least for 5 years. D)List of customers (min 5) with address, in India or abroad, where similar creep machines has been supplied by the party in the last 5 years. In case of Foreign Supplier, similar creep machines has been supplied (at least two customers with minimum of Five similar machines supplied in total) in India within last 5 years.	
		<ul style="list-style-type: none"> • The supplier should install the equipment in the department • Calibration/ Verification certification of each transducers and all other digital and non-digital instruments and probes should be submitted along with items • Installation has to be done at Metallurgy department, BHEL Corporate R&D Division, 	

II	Installation, Warranty and other details:	<p>Hyderabad for 25 machines and other 25 machines at Mechanical Metallurgy Department, NTPC, NETRA, by the OEM or their authorized service agency/ personnel. All cables and adapters required for integration of the equipment have to be supplied along with the equipment. It is the responsibility of the supplier to integrate all the systems (including auxiliaries and accessories) and ensure the functionality of the entire equipment and each accessory. • Supplier should intimate all pre-installation and utility requirements • The supplier has to demonstrate all the functions of the system according to the specifications after successful commissioning at R&D, Hyderabad and NTPC, NETRA. • Short term creep test for accuracy and repeatability of the result to assess the machine reliability for creep testing • Component manuals and drawings should be included • Any deviation from the specifications mentioned must be pointed out. . Warranty to be provided for 18 months from the date of supply or 12 months from the date of installation of creep testing machines at customer's site. whichever is latter.</p>	
III	Pre Dispatch inspection & Training	<p>Pre-dispatch inspection will be carried out at supplier's works. Suppliers should inform the readiness of the equipment well in advance. PDI (3 days) & Training (3 days) for two engineers for a period of 6 days at supplier's works for operation, programming and maintenance of the ordered item shall be provided by the supplier on free of cost basis. The supplier shall demonstrate all the functions of the system according to the specifications. User Engineers will conduct the short term creep test for accuracy and repeatability of the</p>	

		result to assess the machine reliability for creep testing. BHEL shall do PDI and Training for 25 machines and PDI and Training for other 25 machines will be taken care by M/s NTPC Ltd.Travelling, Lodging and boarding of the engineers to BHEL/NTPC account	
IV	Others:	A) Offer should include 1. Brochures/ Technical details/ supporting information for compliance to the all the item specifications listed in the enquiry has to be submitted along with the offer. Photographs of the equipment also have to be submitted. B) PRICE BID - giving full Prices in Foreign Currency or in Indian Rupees for (a) Main Equipment & Essential Accessories. (b) Spares. (c) Daily support to be provided by the vendor for maintenance of the creep machines, data logging system, UPS system after successful installation at Creep Lab, BHEL R&D, Hyderabad during warranty and during subsequent AMC periods for 25 machines and other 25 machines at NTPC, NETRA. (d) AMC Charges for next 3 years (per year basis) to be quoted for the machines. Quotation for next 3 years AMC which will be considered for evaluation of the bid but payable only after award of AMC contract.	
V	Supply of Items	Part Supply of 25 Creep Machines as one lot for BHEL R&D and second part supply of 25 Creep Machines for NETRA, NTPC Ltd are acceptable.	

* Vendors are advised to write specifications in detail and not to write like 'Complied/ Yes / No ' etc. in specifications.

Signature of the bidder with Seal & Date

BHEL R&D
RD:DP:MPX:F-22

LOADING FACTORS



NOTE : IN CASE OF DEVIATION TO BHEL TENDER SPECIFIED TERMS, LOADING FACTOR INDICATED IN FOLLOWING TABLE WILL BE APPLIED

TO QUOTED PRICE WHILE EVALUATING THE LOWEST QUOTE

A. FOR INDIGENOUS PURCHASES					
SLNO	SCOPE	COMMERCIAL TERMS	BHEL STANDARD TERM	AS OFFERED	LOADING FACTOR FOR NON COMPLIANCE TO BHEL STANDARD TERMS
A.1	SUPPLY OF EQUIPMENT INCLUDING ERECTION AND COMMISSIONING (E&C)	PAYMENT TERMS	DIRECT PAYMENT: 80% PAYMENT OF SUPPLY VALUE SHALL BE MADE WITHIN 45 DAYS FROM THE DATE OF RECEIPT OF MATERIAL AT BHEL. BALANCE 20% OF SUPPLY VALUE PLUS 100% OF THE E&C PORTION OF PO VALUE WILL BE PAID AGAINST E&C CERTIFICATE ISSUED BY BHEL AND SUBMISSION OF PERFORMANCE BANK GUARANTEE (PBG) VALID FOR 60 DAYS BEYOND THE WARRANTY PERIOD BY SUPPLIER FROM ANY OF THE CONSORTIUM BANKS OF BHEL FOR 10% OF TOTAL PO VALUE IN THE PRESCRIBED FORMAT. THE PBG CONFIRMATION CHARGES SHALL BE BORNE BY VENDOR	SAME	NO LOADING
				ANY OTHER	SUBMIT BANK GUARANTEE AT THE TIME OF PAYMENT IN THE PRESCRIBED FORMAT OF THE AMOUNT EXCEEDING 80% OF PO VALUE, VALID TILL ISSUE OF E&C CERTIFICATE FOR THE EQUIPMENT. HOWEVER IN NO CASE PAYMENT AGAINST DISPATCH SHALL EXCEED 90% OF THE PO VALUE ADDITIONALLY, LOADING AT BENCHMARK PRIME LENDING RATE (BPLR) OF SBI AS APPLICABLE ON THE SCHEDULED DATE OF TENDER OPENING+2%, FOR THE AMOUNT & PERIOD OF RELAXATION SOUGHT BY BIDDER
B. FOR FOREIGN PURCHASES (IMPORTED)					
B1	SUPPLY OF EQUIPMENT INCLUDING ERECTION AND COMMISSIONING (E&C)	PAYMENT TERMS	PAYMENT THROUGH LC (LC OPENING CHARGES ARE TO BE LOADED), PAYMENT OF SUPPLY VALUE SHALL BE 80% ON DISPATCH AND 20% ON ISSUE OF E&C CERTIFICATE. PAYMENT OF E&C VALUE SHALL BE MADE AGAINST E&C CERTIFICATE SHALL BE ISSUED BY BHEL. E&C CERTIFICATE SHALL BE ISSUED ON SATISFACTORY COMPLETION OF ERECTION, COMMISSIONING, JOB PROVING, PERFORMANCE TESTS, TRAINING TO OPERATORS ETC AS ENVISAGED IN PO. THE L/C SHALL BE OPENED BY BHEL AS PER FOLLOWING: (i) WITHIN 30 DAYS OF RECEIPT OF ORDER ACCEPTANCE, AN IRREVOCABLE UNCONFIRMED L/C WILL BE OPENED FOR 30% OF THE PAYMENT TOWARDS SUPPLY, DUE ON SHIPMENT I.E., 24% OF THE SUPPLY VALUE OF PO (30% OF 80%) NOT EARLIER THAN 60 DAYS BEFORE THE SHIPMENT DATE, THE VALUE OF THIS IRREVOCABLE UNCONFIRMED L/C WOULD BE ENHANCED FROM 24% TO 80% OF THE SUPPLY VALUE OF PO THE ABOVE L/C CAN BE NEGOTIATED AFTER THE SHIPMENT AGAINST SUBMISSION OF B/L OR AWB AND SUCH OTHER DOCUMENTS AS MENTIONED IN THE PO. THE ABOVE L/C WILL BE VALID FOR A PERIOD EXTENDING 21 DAYS BEYOND THE SHIPMENT DATE FOR NEGOTIATION OF DOCUMENTS (ii) 15 DAYS PRIOR TO THE SCHEDULED & CONFIRMED ARRIVAL OF THE TECHNICIANS OF SUPPLIER WITH THEIR NAMES, AN IRREVOCABLE UNCONFIRMED L/C WILL BE OPENED FOR A VALUE EQUAL TO 20% OF THE SUPPLY VALUE OF PO PLUS 100% OF THE E&C VALUE OF PO. THE VALIDITY OF L/C WOULD BE SUFFICIENT TO COVER THE PERIOD REQUIRED FOR THE COMPLETION OF E&C PLUS 21 DAYS AS NEGOTIATION PERIOD. THIS L/C CAN BE NEGOTIATED AFTER: (a) COMPLETION OF E&C OF THE EQUIPMENT IN BHEL AND AGAINST E&C CERTIFICATE ISSUED BY BHEL AND (b)	SAME	NO LOADING
				ANY OTHER	SUBMIT BANK GUARANTEE AT THE TIME OF OPENING OF LC IN THE PRESCRIBED FORMAT OF THE AMOUNT EXCEEDING 80% OF PO VALUE, VALID TILL ISSUE OF E&C CERTIFICATE FOR THE EQUIPMENT. HOWEVER IN NO CASE PAYMENT AGAINST DISPATCH SHALL EXCEED 90% OF THE PO VALUE. ADDITIONALLY, FOR ANY DEVIATION SOUGHT INCLUDING AS MENTIONED ABOVE, IN PAYMENT TERMS BY BIDDER W.R.T. TENDER CONDITIONS, FOLLOWING LOADING SHALL BE FOLLOWED: (A) BENCHMARK PRIME LENDING RATE (BPLR) OF SBI AS APPLICABLE ON THE SCHEDULED DATE OF TENDER OPENING+2%, FOR THE AMOUNT & PERIOD OF RELAXATION SOUGHT BY BIDDER (B) ON ACCOUNT OF PAYMENT THROUGH LC, IF INSISTED BY BIDDER, BANK CHARGES SHALL ALSO BE LOADED FOR THE DEVIATION IN (i) OPENING OF LC BY BHEL AND (ii) PERIOD AND AMOUNT OF LC W.R.T. NIT NORMS, AS PER THE PREVAILING BANK RATES

			SUBMISSION OF PERFORMANCE BANK GUARANTEE (PBG) BY SUPPLIER IN THE PRESCRIBED FORMAT VALID FOR 60 DAYS BEYOND THE WARRANTY PERIOD FROM ONE OF THE CONSORTIUM BANKS OF BHEL OR FROM A REPUTED BANK AND CONFIRMED BY CONSORTIUM BANK OF BHEL FOR 10% OF TOTAL PO VALUE. THE PBG CONFIRMATION CHARGES SHALL BE BORNE BY VENDOR.	
--	--	--	---	--

C. PENALTY FOR DELAYED DELIVERY (COMMON FOR INDIGENOUS AND IMPORTS)				
SLNO	COMMERCIAL TERMS	BHEL STANDARD TERM	AS OFFERED	LOADING FACTOR FOR NON COMPLIANCE TO BHEL STANDARD TERMS
C	LD CLAUSE	IN THE EVENT OF DELAY IN AGREED CONTRACTUAL DELIVERY, PENALTY OF 0.5% (HALF PERCENT) PER WEEK BUT LIMITED TO A MAX OF 10% OF TOTAL ORDER VALUE WILL BE APPLICABLE	AGREED	NIL
			IF NOT AGREED	LOADING @ 10% OF THE BASIC MATERIAL COST
			IF AGREED FOR X%	LOADING @ (10-X)% OF THE BASIC MATERIAL COST
D. GUARANTEE/WARRANTY PERIOD (COMMON FOR INDIGENOUS AND IMPORTS)				
SLNO	COMMERCIAL TERMS	BHEL STANDARD TERM	AS OFFERED	LOADING FACTOR FOR NON COMPLIANCE TO BHEL STANDARD TERMS
D	GUARANTEE/WARRANTY PERIOD	STANDARD GUARANTEE/ WARRANTY PERIOD(X)	AGREED	NIL
		MINIMUM QUOTED GUARANTEE / WARRANTY PERIOD(Y)	NOT AGREED FOR STIPULATED BUT AGREED FOR DESIRED GUARANTEE/WARRANTY(Y)	LOADING @ 10 % OF THE ORDER VALUE PER ANNUM FOR THE REDUCED GUARANTEE PERIOD (X-Y)

BHEL R&D

Terms & Conditions of Reverse Auction



Against this enquiry for the subject item/ system with detailed scope of supply as per enquiry specifications, BHEL may resort to “REVERSE AUCTION PROCEDURE” i.e., ON LINE BIDDING (THROUGH A SERVICE PROVIDER). The philosophy followed for reverse auction shall be English Reverse (No ties).

1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
2. Those bidders who have given their acceptance for Reverse Auction (quoted against this tender enquiry) will have to necessarily submit „online sealed bid? in the Reverse Auction. Non-submission of „online sealed bid? by the bidder for any of the eligible items for which techno-commercially qualified, will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.
3. 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.
4. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
5. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
6. Bidders have to fax the Compliance form (annexure IV) before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
7. In line with the NIT terms, BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at “Total Cost to BHEL” like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.
8. Reverse auction will be conducted on scheduled date & time.
9. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.
10. The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, if required, (Annexure VII) as provided on case-to-case basis to Service provider within two working days of Auction without fail.
11. In case BHEL decides not to go for Reverse Auction procedure for this 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.
12. Bidders shall be required to read the “Terms and Conditions” section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the „Business Rules of Reverse Auction?, which will be communicated before the Reverse Auction.
13. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action as per extant BHEL guidelines, shall be initiated by BHEL and the results of the RA scrapped/ aborted.
14. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.
15. In case BHEL decides to go for reverse auction, the H1 bidder (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process.

AUTHORISATION LETTER FOR E-PAYMENT/ NEFT / RTGS
(PLEASE FILL UP THE FORM COMPLETELY IN CAPITAL LETTERS ON YOUR COMPANY LETTERHEAD ONLY)

Vendor Code (to be filled by BHEL)	
------------------------------------	--

Type of Request (Tick one)	NEW	CHANGE
1 Company Name		
2 Address		
3 City with PIN Code		
4 State		
5 PAN Number		
6 TIN/ VAT No.		
7 CST No.		
8 Service Tax No.		
9 Name of Contact Person		
10 Mobile number		
11 Ph. no. with STD Code		
12 Fax No. with STD Code		
13 Email ID		
14 Website (URL)		

BANK DETAILS FOR EFT / RTGS

1	Bank Name	
2	Branch	
3	Branch Code	
4	Branch Address	
5	Branch Phone No	
6	Account No.	
7	Account Type: SB/ Current/ other (Specify)	
8	MICR Code	
9	IFSC Code	

I, as an authorized representative / owner of the above named company, hereby state as under:

1. Enclosed here with a cancelled cheque in support of our company's bank details.
2. Authorize BHEL R&D Hyderabad, to electronically make payments to the designated bank account with bank charges, if any, to our account.
3. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold BHEL / transferring Bank responsible.
4. I hereby certify that the particulars given above are true, complete and correct.
5. This authority remains in full force until BHEL receives and acknowledge written notification requesting change or cancellation.

Date :
Company
Seal

Authorised Signatory
Designation :



Bharat Heavy Electricals Limited

Corp. R&D
DIVISION
VIKAS
NAGAR,

HYDERABAD- 500 093 (INDIA)

RD:MPX:F-13

Ph: 040 - 23772704, Fax: 040 - 23770698, email: mpx@bhelrnd.co.in

VENDOR REGISTRATION FORM

(Indigenous supplier)

[FORM TO BE SUBMITTED* BY THE BIDDER ALONG WITH TECHNICAL-BID]

Before filling, please refer to instructions on page-4

1.0 VENDOR PROFILE:

1.1 Name and address of the vendor:

Phone Nos.:

Fax No.:

Email: 1. 2.

1.2 Local representative name & address in Hyderabad/Secundrabad :

Phone Nos.:

Fax No.:

Email:

Contact Person:

Mobile No:

2.0 TYPE OF ORGANISATION:

PROPRIETORSHIP	Company:	Sister Concern (mention vendor registration number of main organization)	
Partnership	CORPORATION	Small Scale Industry	ANY OTHER(Please specify)

In case of SSI unit, copy of registration to be enclosed. It is requested that MSME registration certificate to be enclosed

3.0 ANNUAL TURN OVER:

#	Year	Turn-Over, Rs.
1	Current Year(budgeted)	
2	Previous year (200 - 0)	
3	Prior Year (200 - 0)	

4.0 NAME AND ADDRESS OF THE BANKER:

4.1 Bank Name

4.2 Branch name

4.3 Account number

4.4 Account Type

4.5 MICR Code:

4.6 IFSC Code(RTGS/NEFT):

4.7 Bank Phone number(s),

Blank cheque, duly cancelled, to be enclosed.

Please note that all payments shall be made through Electronic clearance services to your above account against the orders executed, if any.

5.0 REGISTRATION PARTICULARS(relevant copies to be enclosed)

5.1 IT Permanent Account No.(PAN):

5.2 State Sales Tax/VAT Registration No:

5.3 Central Sales Tax Registration No:

5.4 ED Registration No:

5.5 Service Tax Registration No:

5.6 PF Account No:

5.7 Labour Licence No:

5.8 ESI Account No:

6.0 CONTACT PERSON: S/Sri:

Designation:

Phone / Mobile No:

7.0 TOTAL NUMBER OF EMPLOYEES:

Graduates (Engr/Scientists/Mgmt/Fin.)	Consultants	Workers		
		Sup./Skilled	Semiskilled	Unskilled

8.0 LIST OF PRODUCTS/ SERVICES OFFERED:

#	Products/ Services	Capacity
1		
2		
3		
4		
5		
6		

9.0 REFERENCE LIST :

(Only recognized public and private sector companies, attach if printed copy available)

#	Customer	Volume / Year
1		
2		
3		
4		
5		
6		
7		

10.0 INFRASTRUCTURE / FACILITIES:

#	Facility (with specifications)	Age/ Year procured
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

11.0 REGISTRATION WITH OTHER BHEL UNIT/UNITS:

#	Unit	Registration No	Year
1			
2			
3			
4			

12.0 ANY OTHER INFORMATION :**DECLARATION:**

The information furnished above is true and authentic.

(CEO / PROPRIETOR)

SEAL:

DATE:

Note:

1. Registered bidders, having BHEL (R&D) registration no. or have submitted this format for registration, need not furnish this information again.
2. The competent authority reserves the right to accept or reject the registration.
3. Vendors approved for registration will be informed by mail / email, as convenient. A separate communication will be sent in case of non-registration also, citing reasons thereof.
4. BHEL reserves the right to take penal action as deemed fit if any of the information provided by the vendor(s) is found to be incorrect.
5. AGM, Head (MM) may be contacted for clarification/additional information on registration.

Instructions

1. Fill all items. Please mention "N.A." for items/ clauses not applicable.
2. Use A4 sheets for this document and the enclosures. Use of additional sheets is permitted if space provided is not adequate.
3. Attach copies of latest documents in respect of items 5.0 (Registration no.s)
4. Photographs of registered office and the chief executive/proprietor shall be furnished.



Bharat Heavy Electricals Limited

Corp. R&D DIVISION

VIKAS NAGAR,

HYDERABAD- 500 093 (INDIA)

SUPPLIER REGISTRATION FORM

(FOREIGN SUPPLIER)

RD:MPX:F-14

ALL COLUMNS SHOULD BE PROPERLY FILLED IN THE SPACE PROVIDED FOR.WHEREVER IT IS NOT APPLICABLE PLEASE WRITE "NOT APPLICABLE".INCOMPLETE OR INCORRECT FORMS MAY NOT BE CONSIDERED.

1.0 GENERAL INFORMATION:

1.1 NAME OF COMPANY

1.2 DETAILS OF HEAD OFFICE:

ADDRESS :
 TELEPHONE :
 FAX :
 EMAIL :
 WEB SITE :

1.3 DETAILS OF FACTORY/WORKS:

ADDRESS :
 TELEPHONE :
 FAX :
 EMAIL :
 WEB SITE :

1.4 DETAILS OF MARKETING AGENT

ADDRESS :
 TELEPHONE :
 FAX :
 EMAIL :
 WEB SITE :

1.5 CHIEF EXECUTIVE

1.6 CONTACT PERSON(S)

FOR PRODUCT OFFERED

NAME(S) :
 OFFICIAL CPACITY :
 ADDRESS :
 TELEPHONE :
 FAX :
 EMAIL :

1.7 YEAR OF ESTABLISHMENT

1.8 PRODUCTION CAPACITY PER ANNUM

1.9 PARTICULARS OF PRODUCT INCLUDING
 SPECIFICATION AND RANGE OFFERED
 FOR REGISTRTION
 (Attach brouchers and catalogues)

1.10 NAME(S) OF BANKERS

1.11 BANKER'S CERTIFICATE

1.12 PORT OF LOADING

1.13 NEAREST AIRPORT

1.14 NAME OF THE INDIAN AGENT, IF ANY
 WITH AUTHORIZATION LETTER

2.0 FINANCIAL INFORMATION:

2.1 TOTAL CAPACITY

2.2 ANNUAL TURN OVER FOR LAST 3 YEARS

2.3 WHEHER CREDIT LICENSE ACCEPTABLE YES/NO

3.0 QUALITY MANAGEMENT SYSTEMS

ENCLOSED FORMAT PART-B

3.1 EXPERIENCE LIST FOR SAME/ SIMILAR ITEMS
 TO BE ENCLOSED

4.0 FUTURE EXPANSION PLANS:

(Give details)

5.0 LIST OF ENCLOSURES:

(Including brochures, catalogues, technical literature etc)

6.0 ANY OTHER INFORMATION:

SIGNATURE OF SUPPLIER (Authorized signatory)

NAME :
DESIGNATION :
DATE :
OFFICIAL SEAL

Note:

1. BHEL Reserves the right to take penal action as deemed fit if any of the information provided by the vendor is found to be incorrect.
2. Please attach separate sheets, if space found is inadequate



Bharat Heavy Electricals Limited

Corp. R&D DIVISION

VIKAS NAGAR,

HYDERABAD- 500 093 (INDIA)

Ph: 040 – 23772704, Fax: 040 – 23770698, email: mpx@bhelrnd.co.in

RD:MPX:F-13

GUIDE LINES REGARDING DEALINGS WITH INDIAN AGENTS OF FOREIGN SUPPLIERS

- i. BHEL shall deal directly with foreign vendors, wherever required, for procurement of goods. However, if the foreign principal desires to avail of the services of an Indian agent, then the foreign principal should ensure compliance to regulatory guidelines - which require mandatory submission of an Agency Agreement.
- ii. It shall be incumbent on the Indian agent and the foreign principal to adhere to the relevant guidelines of Government of India, issued from time to time.
- iii. The Agency Agreement should specify the precise relationship between the foreign OEM / foreign principal and their Indian agent and their mutual interest in the business. All services to be rendered by agent/ associate, whether of general nature or in relation to the particular contract, must be clearly stated by the foreign supplier/ Indian agent. Any payment, which the agent or associate receives in India or abroad from the OEM, whether as commission or as a general retainer fee should be brought on record in the Agreement and be made explicit in order to ensure compliance to laws of the country.
- iv. Any agency commission to be paid by BHEL to the Indian agent shall be in Indian currency only.
- v. Whenever Indian agents are representing on behalf of their principals the relevant authorisation letter and agreement copy to be enclosed along with Technical bid to consider the offer.

