



RD:DP:MPX:F-04  
Ref: 551500931

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

PHONES:23774494 (EXT:9804)  
FAX : 91 40 23770698

ENQUIRY

Date 17-07-2015

Enquiry for **HPC,LAN & AC System under 5 years lease for CFD lab.**

Enquiry No:551500931

Enquiry Date : 17-07-2015

Due Date: 18-08-2015


Indicative Delivery Date : 30-10-2015

Sl.No	Item Description	Unit	Qty
1	Master/Login Nodes as per detailed technical specification	NO	1
2	Compute Nodes - with GPU Card as per detailed technical specification	NO	3
3	Compute Nodes - without GPU Card as per detailed technical specification	NO	3
4	Storage Server I/O Node as per detailed technical specification	NO	2
5	Parallel File System Storage as per detailed technical specification	NO	1
6	Backup Server as per detailed technical specification	NO	1
7	Offline NAS Storage as per detailed technical specification	NO	1
8	Gigabit Ethernet Switch as per detailed technical specification	NO	1
9	FDR Infiniband Switch with Cables as per detailed technical specification	NO	1
10	KVM Switch as per detailed technical specification	NO	1
11	Display console as per detailed technical specification	NO	1
12	42 U Rack as per detailed technical specification	NO	1
13	Cluster Management S/W with GUI web based management and monitoring, Job scheduler software, C/C++, Java, Python, Fortran compilers and parallel libraries, GUI portal for job submission, License analytical & reporting tool as per detailed technical specification	SET	1
14	Operating System : RHEL Head Node, RHEL HPC for Compute Node, RHEL standard for Backup & I/O Nodes as per detailed technical specification	SET	1
15	Backup Software as per detailed technical specification	SET	1
16	CAT6 UTP 23AWG Solid:305M,as per detailed technical specification	EACH	20
17	Dual Face Plate (Square),as per detailed technical specification	EACH	90
18	CAT 6 keystone Jack UTP-White,as per detailed technical specification	EACH	90
19	Back Box For Single, Dual (Cat 5e/Cat 6/ Cat6a, Square),as per detailed technical specification	EACH	90
20	CAT6 UTP Patch Panel Keystone Type - 24 Port-Fully Loaded,as per detailed technical specification	EACH	4
21	CAT6 UTP 24AWG PATCH CORD:1M as per detailed technical specification	EACH	90
22	CAT6 UTP 24AWG PATCH CORD:2M as per detailed technical specification	EACH	90
23	PVC Pipe, as per detailed technical specification	METRE	100
24	Installation, Testing and Documentation, as per detailed technical specification	LOT	1
25	Supply of 3.6 TR Round Flow Inverter Type Cassette AC with wireless remote & Single phase unit with Eco friendly Gas as per detailed technical specification	NO	2
26	Copper Pipe with Insulation tube, (Running meter)as per detailed technical specification	METRE	20
27	Power cable for Indoor to Outdoor (Running meter)as per detailed technical specification	METRE	30
28	L' Type Outdoor Stand as per detailed technical specification	NO	2
29	Cassette AC Installation and Commissioning Charges as per detailed technical specification	NO	2

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

MKVH Sarma  
Addl GM ( MPX )  
sarma\_mkvh@bhelrnd.co.in

	<b>ENQUIRY &amp; QUALIFYING CRITERIA</b>	Volume - 1 Enquiry No 551500931
HPC,LAN & AC System under 5 years lease for CFD lab.		

1	Tender inviting officer / Authority, Designation and Address	Additional General Manager(MM) BHEL R & D, Vikas Nagar (Near Balanagar), Hyderabad -500093
2	Item Description - Qty	<p>1) Master/Login Nodes as per detailed technical specification - 1 NO</p> <p>2) Compute Nodes - with GPU Card as per detailed technical specification - 3 NO</p> <p>3) Compute Nodes - without GPU Card as per detailed technical specification - 3 NO</p> <p>4) Storage Server I/O Node as per detailed technical specification - 2 NO</p> <p>5) Parallel File System Storage as per detailed technical specification - 1 NO</p> <p>6) Backup Server as per detailed technical specification - 1 NO</p> <p>7) Offline NAS Storage as per detailed technical specification - 1 NO</p> <p>8) Gigabit Ethernet Switch as per detailed technical specification - 1 NO</p> <p>9) FDR Infiniband Switch with Cables as per detailed technical specification - 1 NO</p> <p>10) KVM Switch as per detailed technical specification - 1 NO</p> <p>11) Display console as per detailed technical specification - 1 NO</p> <p>12) 42 U Rack as per detailed technical specification - 1 NO</p> <p>13) Cluster Management S/W with GUI web based management and monitoring, Job scheduler software, C/C++, Java, Python, Fortran compilers and parallel libraries, GUI portal for job submission, License analytical &amp; reporting tool as per detailed technical specification - 1 SET</p> <p>14) Operating System : RHEL Head Node, RHEL HPC for Compute Node, RHEL standard for Backup &amp; I/O Nodes as per detailed technical specification - 1 SET</p> <p>15) Backup Software as per detailed technical specification - 1 SET</p> <p>16) CAT6 UTP 23AWG Solid:305M,as per detailed technical specification - 20 EACH</p> <p>17) Dual Face Plate (Square),as per detailed technical specification - 90 EACH</p> <p>18) CAT 6 keystone Jack UTP-White,as per detailed technical specification - 90 EACH</p> <p>19) Back Box For Single, Dual (Cat 5e/Cat 6/ Cat6a, Square),as per detailed technical specification - 90 EACH</p> <p>20) CAT6 UTP Patch Panel Keystone Type - 24 Port-Fully Loaded,as per detailed technical specification - 4 EACH</p> <p>21) CAT6 UTP 24AWG PATCH CORD:1M as per detailed technical specification - 90 EACH</p> <p>22) CAT6 UTP 24AWG PATCH CORD:2M as per detailed technical specification - 90 EACH</p> <p>23) PVC Pipe, as per detailed technical specification - 100 METRE</p> <p>24) Installation, Testing and Documentation, as per detailed technical specification - 1 LOT</p> <p>25) Supply of 3.6 TR Round Flow Inverter Type Cassette AC with wireless remote &amp; Single phase unit with Eco friendly Gas as per detailed technical specification - 2 NO</p> <p>26) Copper Pipe with Insulation tube, (Running meter)as per detailed technical specification - 20 METRE</p> <p>27) Power cable for Indoor to Outdoor (Running meter)as per detailed technical specification - 30 METRE</p> <p>28) L' Type Outdoor Stand as per detailed technical specification - 2 NO</p> <p>29) Cassette AC Installation and Commissioning Charges as per detailed technical specification - 2 NO</p>
3	Enquiry Reference no.	551500931
4	Indicative Delivery Date	30-10-2015
5	Due date, Time and place for submission of tender	<p>18-08-2015 upto 12 noon.</p> <p>Sealed Quotations shall be addressed to AGM(MM), BHEL R &amp; D Division, Vikas Nagar (Near Balanagar), Hyderabad AP,India Pin - 500 093</p> <p>Quotations can also be deposited in the Tender box located at Security Gate of BHEL R &amp; D BHEL shall not be responsible for any postal/courier delay.</p>

6	Place, Date and time of Tech.Bid opening	Tender Opening Cell (Sangam) BHEL R & D Office. 18-08-2015, 2 PM
7	Mode of Submission of Tender	<p>Please submit your offer in one common sealed cover containing two parts in separate sealed covers as detailed below.</p> <p>1) First Cover shall contain:</p> <ol style="list-style-type: none"> <li>Signed General Terms &amp; Conditions (GTC)</li> <li>Filled and Signed Commercial Terms &amp; Conditions (CTC)</li> <li>Filled and Signed Vendor Specifications against BHEL Specifications (Item wise)</li> <li>Signed commercial bid</li> <li>Copy of Price-bid with price(s) cells blank (un-priced price bid)</li> </ol> <p>2) Second cover shall contain Price Bid Containing Price quotes, applicable taxes, 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.</p> <p>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.</p> <p>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.</p> <p>The e-mail offers should have two attachments.</p> <p>1) One attachment shall contain</p> <ol style="list-style-type: none"> <li>Signed General Terms &amp; Conditions (GTC)</li> <li>Filled and Signed Commercial Terms &amp; Conditions (CTC)</li> <li>Filled and Signed Vendor Specifications against BHEL Specifications (Item wise)</li> <li>Signed commercial bid</li> <li>Copy of Price-bid with price(s) cells blank (un-priced price bid)</li> </ol> <p>2) Second attachment shall contain Price Bid Containing Price quotes, applicable taxes, 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.</p> <p>The subject of the e-mail should contain Enquiry No, Enquiry Date and Due date.</p>

	<b>GENERAL TERMS &amp; CONDITIONS (GTC)</b>	Volume - 1 Enquiry No 551500931
HPC,LAN & AC System under 5 years lease for CFD lab.		

SL.No.	Clause	BHEL REQUIREMENT
1	General	<p>a. All offers must include name of the contact person, phone no/mobile no, Fax no, email-id. Unsigned offers are liable for rejection.</p> <p>b. We, BHEL R&amp;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 &amp; 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.</p> <p>c. Taxes &amp; Duties quoted will be taken for evaluation of landed cost &amp; 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.</p> <p>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.</p> <p>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.</p> <p>e. BHEL R&amp;D do not issue 'C' form .</p> <p>f. L1 status shall be decided on Cost to BHEL Basis.</p>
2	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>
3	Late Tenders	Tenders received after due date/time(12:00hrs) will not be considered
4	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>
5	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.
6	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.
7	Price bid evaluation	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 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.
8	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.
9	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.
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. Guidelines for suspension of business dealings with suppliers/contractors are available on www.bhel.com under supplier registration page
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	Security Deposit	Successful bidder shall submit a security deposit at the time of release of order and the amount will not carry any interest. The amount of security deposit will be as below: - Upto Rs 10 Lakhs : 10%. - Above Rs 10 Lakhs and upto Rs 50 Lakhs : Rs 1 Lakhs + 7.5% of amount exceeding Rs 10 Lakhs. - Above Rs 50 Lakhs: Rs 4 Lakhs + 5% of amount exceeding Rs 50 Lakhs.
13	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.
14	EMD	Submission of earnest money deposit (EMD) along with offer is required. EMD is to be deposited in cash (as permissible under IT act, or by pay-order/Demand Draft drawn in favour of BHEL R&D,Vikasnagar,Hyderabad 500 093. EMD amount will be returned to all unsuccessful bidders after placement of order. EMD amount shall not carry any interest. EMD amount is Rs. 200000
15	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.
16	Arbitration	Subject to the jurisdiction of Hyderabad/Secunderabad,Andhra Pradesh,India in respect of any suit or other legal proceedings relating this contract.
17	Micro Small Enterprises (MSEs)	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, 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. Certificate by chartered Accountant on letter head  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 : 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 The above investment of Rs..... Lacs is within permissible limit of Rs..... Lacs for.....Micro/Small (Strike off which is not applicable) Category under MSMED Act 2006.  Date:  (Signature) Name- Membership number -- Seal of Chartered Accountant
18	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 &amp; Date

	<b>COMMERCIAL TERMS &amp; CONDITIONS (CTC)</b>	Volume - 1 Enquiry No 551500931
HPC,LAN & AC System under 5 years lease for CFD lab.		

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	Two part	<p>Please submit your offer in one common sealed cover containing two parts in separate sealed covers as detailed below.</p> <p>1) First Cover shall contain:</p> <ol style="list-style-type: none"> <li>Signed General Terms &amp; Conditions (GTC)</li> <li>Filled and Signed Commercial Terms &amp; Conditions (CTC)</li> <li>Filled and Signed Vendor Specifications against BHEL Specifications (Item wise)</li> <li>Signed commercial bid</li> <li>Copy of Price-bid with price(s) cells blank (un-priced price bid)</li> </ol> <p>2) Second cover shall contain Price Bid Containing Price quotes, applicable taxes, 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.</p> <p>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.</p> <p>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.</p> <p>The e-mail offers should have two attachments.</p> <p>1) One attachment shall contain</p> <ol style="list-style-type: none"> <li>Signed General Terms &amp; Conditions (GTC)</li> <li>Filled and Signed Commercial Terms &amp; Conditions (CTC)</li> <li>Filled and Signed Vendor Specifications against BHEL Specifications (Item wise)</li> <li>Signed commercial bid</li> <li>Copy of Price-bid with price(s) cells blank (un-priced price bid)</li> </ol> <p>2) Second attachment shall contain Price Bid Containing Price quotes, applicable taxes, 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.</p> <p>The subject of the e-mail should contain Enquiry No, Enquiry Date and Due date.</p>	
3	Validity of Offer	90 days from date of techno-commercial bid opening.	
4	Price basis	<p>The prices shall be firm for entire period of contract.</p> <p>The suppliers shall indicate packing and forwarding charges, if any, separately.</p> <p>All foreign suppliers shall quote the lowest prices on 'FOB-Nearest International Airport/Sea port' basis. An amount of 3% on basic value towards freight and insurance will be added for cost comparison.</p> <p>All Indian suppliers shall quote the lowest prices on 'free delivery at BHEL R&amp;D Stores or F.O.R destination' basis only.</p>	
5	Rate Contract	<p>In case the goods enquired are on Rate Contract basis with any other unit of BHEL, such fact should be clearly indicated in the quotation giving full particulars of Rate Contract number, validity and price and also your willingness to comply with order if placed against such Rate Contract. A copy of Rate contract signed by the supplier should be sent with the quotation.</p>	
6	Freight & Insurance	<p>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.</p>	
7	Agency Agreement	<p>Guidelines regarding dealing with Indian agents of foreign suppliers</p> <ol style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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 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 ensure compliance to the laws of the country.</li> <li>Any agency commission to be paid by BHEL to the Indian agent shall be Indian currency.</li> <li>When ever Indian agents are representing on behalf of their principals, the relevant authorization letter and</li> </ol>	

		agreement copy to be enclosed along with technical bid to consider the offer.	
8	Delivery Period	<p>FOR INDIAN SUPPLIES :</p> <p>Suppliers are requested to quote within the delivery date mentioned in the enquiry. They shall also mention one of the following delivery periods compulsorily.</p> <p>1) Delivery Period from date of Purchase order =====</p> <p>2) Delivery Period from receipt of material / input data / drawings etc. from BHEL===== (if applicable)</p> <p>3) Delivery Period from receipt of approval of design documents / drawings etc. by BHEL===== (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> <p>FOR FOREIGN SUPPLIES :</p> <p>Suppliers are requested to quote within the delivery date mentioned in the enquiry. They shall also mention one of the following delivery periods compulsorily.</p> <p>1. Delivery Period from date of Purchase order :=====</p> <p>2. Delivery Period from receipt of input data / drawings etc. from BHEL===== (if applicable)</p> <p>3. Delivery Period from receipt of approval of design documents / drawings etc. by BHEL===== ( if applicable )</p> <p>4. Delivery Period from date of LC Opening ===== ( if applicable)</p> <p>5. Delivery Period from date of PO acceptance =====</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> <p>Pl. mention any other issues/constraints like export clearance etc. explicitly, if any =====</p>	
9	Taxes and duties	All Indian suppliers shall clearly mention current sales tax/VAT,Excise duty and Service Tax etc, if any,payable in addition to the quoted price and indicate applicable rates/percentage,item-wise clearly.The vendors should mention applicable Registration Number(s) specifically in their quotation.The suppliers are requested to submit their bids clearly stating applicable taxes and duties.The quoted taxes/duties will be taken for cost evaluation and order placement and no change will be entertained later except in the case of changes made by the government. 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. However Proof of payment of service tax is required to be submitted for reimbursement of the same.	

**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**

	<b>ITEM SPECIFICATIONS</b>	Volume - 2 Enquiry NO 551500931
HPC, LAN & AC System under 5 years lease for CFD lab.		

SL.No.	Item														
G	<b>General Specifications</b>														
	sl no	Descriptions	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th data-bbox="671 418 986 450">BHEL Specifications</th> <th data-bbox="986 418 1348 450">Vendor Specifications/ Deviations</th> </tr> </thead> <tbody> <tr> <td colspan="2" data-bbox="671 450 1348 524" style="text-align: center;">&amp;nbsp;</td> </tr> <tr> <td data-bbox="671 524 986 1010">           Processor: 2 Nos. INTEL XEON 12C 2.5 GHz Processor (E5-2690 V3 or higher) with minimum 30 MB cache or higher            Memory: 128 GB DDR4 scalable to 256 GB. Memory speed 2133 MHz or better and should have free memory slots for future expansion.            Hard disk drive: at least 4 x 600 GB 10k RPM or better 6 Gbps onboard SAS with RAID controller having support for RAID 0, 1, 5/6, 10.            One Internal DVD RW drive.            NIC: 4 x 1 GB Ethernet port with compatible remote management controller port with all required necessary cable and accessories.            Interconnect : Minimum one 56Gbps FDR Infiniband port            Power Supply/Fan: must be N +1 redundant, hot swappable            Ports: 1 serial, 2 USB            Rack mounting Kit         </td> <td data-bbox="986 524 1348 1010"></td> </tr> <tr> <td data-bbox="671 1010 986 1503">           Processor: 2 Nos. INTEL XEON 12C 2.5 GHz Processor (E5-2690 V3 or higher) with minimum 30 MB cache or higher            Memory: 8 GB DDR4 per core and should be scalable to 16 GB per core. Memory Speed 2133 MHz or better (Total 192 GB RAM).            Hard disk drive: at least 300 GB SAS 10k RPM or higher capacity.            GPU: One Nvidia K40 GPU per compute node            One Internal DVD RW drive.            NIC: NIC: 2 x 1 GB Ethernet port with compatible remote management controller port with all required necessary cable and accessories            Interconnect : Minimum one 56Gbps FDR Infiniband port            Power Supply/Fan: must be N +1 redundant, hot swappable            Ports: 1 serial, 2 USB            Rack mounting Kit         </td> <td data-bbox="986 1010 1348 1503"></td> </tr> <tr> <td data-bbox="671 1503 986 1951">           Processor: 2 Nos. INTEL XEON 12C 2.5 GHz Processor (E5-2690 V3 or higher) with minimum 30 MB cache or higher            Memory: 8 GB DDR4 per core and should be scalable to 16 GB per core. Memory Speed 2133 MHz or better. (Total 192 GB RAM).            Hard disk drive: at least 300 GB SAS 10k RPM or higher capacity.            One Internal DVD RW drive.            NIC: NIC: 2 x 1 GB Ethernet port with compatible remote management controller port with all required necessary cable and accessories            Interconnect : Minimum one 56Gbps FDR Infiniband port            Power Supply/Fan: must be N +1 redundant, hot swappable            Ports: 1 serial, 2 USB            Rack mounting Kit         </td> <td data-bbox="986 1503 1348 1951"></td> </tr> <tr> <td data-bbox="671 1951 986 1998">Processor: 2Nos. INTEL XEON 8C</td> <td data-bbox="986 1951 1348 1998"></td> </tr> </tbody> </table>	BHEL Specifications	Vendor Specifications/ Deviations	&nbsp;		Processor: 2 Nos. INTEL XEON 12C 2.5 GHz Processor (E5-2690 V3 or higher) with minimum 30 MB cache or higher Memory: 128 GB DDR4 scalable to 256 GB. Memory speed 2133 MHz or better and should have free memory slots for future expansion. Hard disk drive: at least 4 x 600 GB 10k RPM or better 6 Gbps onboard SAS with RAID controller having support for RAID 0, 1, 5/6, 10. One Internal DVD RW drive. NIC: 4 x 1 GB Ethernet port with compatible remote management controller port with all required necessary cable and accessories. Interconnect : Minimum one 56Gbps FDR Infiniband port Power Supply/Fan: must be N +1 redundant, hot swappable Ports: 1 serial, 2 USB Rack mounting Kit		Processor: 2 Nos. INTEL XEON 12C 2.5 GHz Processor (E5-2690 V3 or higher) with minimum 30 MB cache or higher Memory: 8 GB DDR4 per core and should be scalable to 16 GB per core. Memory Speed 2133 MHz or better (Total 192 GB RAM). Hard disk drive: at least 300 GB SAS 10k RPM or higher capacity. GPU: One Nvidia K40 GPU per compute node One Internal DVD RW drive. NIC: NIC: 2 x 1 GB Ethernet port with compatible remote management controller port with all required necessary cable and accessories Interconnect : Minimum one 56Gbps FDR Infiniband port Power Supply/Fan: must be N +1 redundant, hot swappable Ports: 1 serial, 2 USB Rack mounting Kit		Processor: 2 Nos. INTEL XEON 12C 2.5 GHz Processor (E5-2690 V3 or higher) with minimum 30 MB cache or higher Memory: 8 GB DDR4 per core and should be scalable to 16 GB per core. Memory Speed 2133 MHz or better. (Total 192 GB RAM). Hard disk drive: at least 300 GB SAS 10k RPM or higher capacity. One Internal DVD RW drive. NIC: NIC: 2 x 1 GB Ethernet port with compatible remote management controller port with all required necessary cable and accessories Interconnect : Minimum one 56Gbps FDR Infiniband port Power Supply/Fan: must be N +1 redundant, hot swappable Ports: 1 serial, 2 USB Rack mounting Kit		Processor: 2Nos. INTEL XEON 8C	
BHEL Specifications	Vendor Specifications/ Deviations														
&nbsp;															
Processor: 2 Nos. INTEL XEON 12C 2.5 GHz Processor (E5-2690 V3 or higher) with minimum 30 MB cache or higher Memory: 128 GB DDR4 scalable to 256 GB. Memory speed 2133 MHz or better and should have free memory slots for future expansion. Hard disk drive: at least 4 x 600 GB 10k RPM or better 6 Gbps onboard SAS with RAID controller having support for RAID 0, 1, 5/6, 10. One Internal DVD RW drive. NIC: 4 x 1 GB Ethernet port with compatible remote management controller port with all required necessary cable and accessories. Interconnect : Minimum one 56Gbps FDR Infiniband port Power Supply/Fan: must be N +1 redundant, hot swappable Ports: 1 serial, 2 USB Rack mounting Kit															
Processor: 2 Nos. INTEL XEON 12C 2.5 GHz Processor (E5-2690 V3 or higher) with minimum 30 MB cache or higher Memory: 8 GB DDR4 per core and should be scalable to 16 GB per core. Memory Speed 2133 MHz or better (Total 192 GB RAM). Hard disk drive: at least 300 GB SAS 10k RPM or higher capacity. GPU: One Nvidia K40 GPU per compute node One Internal DVD RW drive. NIC: NIC: 2 x 1 GB Ethernet port with compatible remote management controller port with all required necessary cable and accessories Interconnect : Minimum one 56Gbps FDR Infiniband port Power Supply/Fan: must be N +1 redundant, hot swappable Ports: 1 serial, 2 USB Rack mounting Kit															
Processor: 2 Nos. INTEL XEON 12C 2.5 GHz Processor (E5-2690 V3 or higher) with minimum 30 MB cache or higher Memory: 8 GB DDR4 per core and should be scalable to 16 GB per core. Memory Speed 2133 MHz or better. (Total 192 GB RAM). Hard disk drive: at least 300 GB SAS 10k RPM or higher capacity. One Internal DVD RW drive. NIC: NIC: 2 x 1 GB Ethernet port with compatible remote management controller port with all required necessary cable and accessories Interconnect : Minimum one 56Gbps FDR Infiniband port Power Supply/Fan: must be N +1 redundant, hot swappable Ports: 1 serial, 2 USB Rack mounting Kit															
Processor: 2Nos. INTEL XEON 8C															
		Detailed Technical Specification of the High Performance Computing system - Package A													
1	Master Node with following specification - 01 No														
2	COMPUTE NODES- with one GPU Card in each Node with following specification - 03 Nos														
3	COMPUTE NODES- without GPU Card in each Node with following specification - 03 Nos														

4	Storage server I/O Node with following specification - 02 Nos	<p>2.5GHz Processor (E5-2690 V3 or higher)  Memory: 64 GB DDR4 scalable to 256 GB. Memory speed 2133 MHz or better and should have free memory slots for future expansion  Hard disk drive :atleast 2 x 600 GB 10k RPM with 6 Gbps onboard SAS with RAID controller having support for RAID 0, 1, 5/6,10.  One Internal DVDRW drive  NIC: 2 x 1 GB Ethernet port with compatible remote management controller port with all required necessary cable and accessories.  Interconnect : Minimum one 56Gbps FDR Infiniband port  Power Supply/Fan: must be N +1 redundant, hot swappable  Ports: 1 serial, 2 USB Rack mounting Kit</p>
5	Parallel File System Storage with following specification - 01 No	<p>120TB usable Capacity with 20TB usable on SAS 10K Disks and 100TB usable on NL-SAS/SATA 7.2K disks  Dual Active-Active FC Controller; 4GB Cache per controller  RAID 5</p>
6	Backup server with following specification - 01 No	<p>Processor : 2x Intel Xeon E5-2620 V3 6core, 2.4Ghz, 15MB Cache or higher  Memory : atleast 32GB DDR3 Reg ECC 2133Mhz RAM  Hard Disk Drive : Atleast 2x 600GB SAS 10K RPM 2.5-in Hot-Plug Hard Drive with 1 x Dual Port 8Gbps FC HBA RAID 0,1 support  NIC: 2 x 1 GB Ethernet port with compatible remote management controller port with all required necessary cable and accessories  One Internal DVDRW drive  Ports : 1 x Serial Port, 2x USB ports, 2 External SAS 6 Gbps ports  Power Supply/Fan: Dual Hot-Plug Redundant Power Supply Redundant and hot-plug Fans  Rack mount Rail Kit</p>
7	Offline NAS Storage with following specification - 01 No	<p>NAS Storage  50TB usable capacity with 16 x 4TB NL-SAS/SATA disk using RAID 5</p>
8	Gigabit Ethernet switch with following specification - 01 No	<p>1U Ethernet switches with 48 ports, manageable of 10/100/1000 Mbps. Gigabit Ethernet ports (copper)</p>
9	Infiniband switch with following specification - 01 No	<p>18 port FDR IB managed switch with suitable no of IB cables Non-blocking architecture Compatible with OFED (Open Fabric Infiniband stack), Open MPI libraries, OpenSM; Rack mount kit,</p>
10	KVM Switch with Cables with following specification - 01 No	<p>16port KVM Switch and 1U sliding Console with 17" TFT Monitor, Keyboard &amp; Mouse with required cables</p>
11	Rack: ISO standard 42U Rack with following specification - 01 No	<p>42U Industry standard server Rack with all accessories</p>
12	HPC Software Pack with following specification - 01 Set	<p>a. Operating System*: RHEL 6.x Head Node, RHEL HPC for Compute Node, RHEL Standard for Back Up &amp; I/O Nodes - 01 Set  b. Job Scheduler software: 01 Set  c. Cluster Administration software: 01 Set  d. Compilers: GNU, C, C++, Java, Python, Fortran : 01 Set  e. MPI: Open MPI; MPAPICH2 : 01 Set  f. Monitoring software: 01 Set  g. Backup software: 01 Set  h. Cluster Support: 5 years Remote Cluster Support</p>

		** Vendor shall provide RHEL upgrades as and when released and install the same in all the HPC nodes.	
	Detailed Technical Specification of the LAN Up gradation for CFD Lab - Package B		
1	CAT6 Cable	CAT6 UTP 23AWG Solid:305M Each (20 Nos)	
2	Dual Face Plate	Dual Face Plate (Square) Each - 90 Nos	
3	CAT6 Keystone Jack UTP	CAT6 Keystone Jack UTP – White Each 90 Nos	
4	Back Box For Single, Dual	Back Box For Single, Dual (Cat 5e/Cat 6/Cat6a,Square) Each 90 Nos	
5	CAT6 UTP Patch Panel	CAT6 UTP Patch Panel Keystone Type - 24 Port-Fully Loaded Each 4 Nos	
6	CAT6 PATCH CORD (1 mtr)	CAT6 UTP 24AWG PATCH CORD:1M Each - 90 Nos	
7	CAT6 PATCH CORD (2mtr)	CAT6 UTP 24AWG PATCH CORD:2M Each - 90 Nos	
8	PVC Pipe,	PVC Pipe, (100mtrs)	
9	Installation, Testing & Commissioning	Installation, Testing & Commissioning - 1Lot	
10	Note:	Note: The LAN Cable shall be laid from Server room to client station area thru False ceiling. Vendor may visit the site to assess the actual requirement of the services to be provided.	
	Detailed Technical Specification of the Air-conditioning System for CFD Lab - Package C		
1	Air Conitioning System	Supply of 3.6 TR Round Flow Inverter Type Cassette AC with wireless remote & Single phase unit with R-410 Eco Friendly Gas - 02 Nos	
2	Copper Pipe with Insulation tube	Copper Pipe with Insulation tube - 20 mtrs	
3	Power cable for Indoor to Outdoor	Power cable for Indoor to Outdoor - 30 mtrs	
4	L' Type Outdoor Stand	L' Type Outdoor Stand - 02 Nos	
5	Cassette AC Installation & Commissioning	Cassette AC Installation & Commissioning - 02 Nos	
6	Dismantling of existing non working AC	Note: vendor shall dismantle existing non working AC (Daikin make) and install the new AC in the same place. Vendor may visit the site to assess the actual requirement of the services to be provided.	

\* 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	PAYMENT TERMS	100% PAYMENT, WITH IN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF MATERIAL AT BHEL R & D	SAME	NIL
				PAYMENT AGAINST PROFORMA INVOICE / DESPATCH DOCUMENTS	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE TOTAL PO VALUE FOR ONE MONTH
				FULL ADVANCE PAYMENT WITH BANK GUARANTEE	LOADING @ ( SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE TOTAL PO VALUE FOR THE DELIVERY PERIOD (Rounded off to nearest month) + 1 MONTH
				PART ADVANCE (X%) PAYMENT WITH BANK GUARANTEE AND BALANCE PAYMENT WITH IN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF THE MATERIAL	LOADING @ ( SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (Rounded off to nearest month) + 1 MONTH
				PART ADVANCE (X%) PAYMENT WITH BANK GUARANTEE AND BALANCE PAYMENT ON RECEIPT AND ACCEPTANCE OF MATERIAL	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (Rounded off to nearest month) + 1 MONTH AND LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON BALANCE AMOUNT FOR ONE MONTH
A.2	SUPPLY OF EQUIPMENT INCLUDING ERECTION AND COMMISSIONING (E&C)	PAYMENT TERMS	90% PAYMENT, WITH IN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF MATERIAL AND BALANCE 10% WITH IN 30 DAYS OF COMPLETION OF E&C.	SAME	NIL
				100% PAYMENT WITH IN 30 DAYS AFTER COMPLETION OF SUPPLIES AND E&C	NIL
				90% PAYMENT AGAINST PROFORMA INVOICE/ DESPATCH DOCUMENT AND BALANCE 10% WITH IN 30 DAYS AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON 90% OF THE VALUE OF PO FOR ONE MONTH
				90% PAYMENT AGAINST PROFORMA / DESPATCH DOCUMENT AND BALANCE 10% AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON TOTAL VALUE OF THE PO FOR ONE MONTH
				90% ADVANCE PAYMENT WITH BANK GUARANTEE AND BALANCE 10% PAYMENT WITH IN 30 DAYS AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON 90% OF THE PO VALUE FOR DELIVERY PERIOD (ROUNDED OFF TO THE NEAREST MONTH) + MONTH
				PART ADVANCE (X%) PAYMENT WITH BANK GUARANTEE AND (90 - X) % PAYMENT ON RECEIPT AND ACCEPTANCE OF THE MATERIAL AND 10% PAYMENT WITH IN 30 DAYS AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (ROUNDED OFF TO THE NEAREST MONTH)+ 1 MONTH AND LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON BALANCE (90-X)% AMOUNT FOR ONE MONTH
				PART ADVANCE (X%) PAYMENT WITH BANK GUARANTEE AND BALANCE (90 - X) % PAYMENT AFTER RECEIPT AND ACCEPTANCE OF THE MATERIAL AND 10% PAYMENT AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (ROUNDED OFF TO THE NEAREST MONTH)+ 1 MONTH AND LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON BALANCE AMOUNT (100-X)% FOR ONE MONTH

B. FOR FOREIGN PURCHASES (IMPORTED)					
SLNO	SCOPE	COMMERCIAL TERMS	BHEL STANDARD TERM	AS OFFERED	LOADING FACTOR FOR NON COMPLIANCE TO BHEL STANDARD TERMS
B.1	SUPPLY OF EQUIPMENT	PAYMENT TERMS	100% PAYMENT BY WIRE TRANSFER WITHIN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF MATERIAL AT BHEL R&D. (DESPATCH DOCUMENTS WILL BE SENT TO BHEL R&D DIRECTLY ALONG WITH BANK DETAILS)	SAME	NIL
				SIGHT DRAFT ON PRESENTATION OF DESPATCH DOCUMENTS VIZ INVOICE, AWB ETC TO OUR BANKERS	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+6%) ON THE BASIC VALUE FOR ONE MONTH PLUS PAYMENT RELATED BANK CHARGES INCURRED BY BHEL
				LC PAYMENT AGAINST DESPATCH DOCUMENTS	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE BASIC VALUE FOR ONE MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL
				FULL ADVANCE PAYMENT BY WIRE TRANSFER /LC WITH BANK GUARANTEE	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE BASIC VALUE FOR DELIVERY PERIOD(Rounded off to nearest month) + 1 MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL
				PART ADVANCE (X%) PAYMENT BY WIRE TRNSFER/LC WITH BANK GUARANTEE AND BALANCE PAYMENT WITH IN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF THE MATERIAL	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (Rounded off to nearest month) + 1 MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL
				PART ADVANCE (X%) PAYMENT BY WIRE TRNSFER/LC WITH BANK GUARANTEE AND BALANCE PAYMENT ON RECEIPT AND ACCEPTANCE OF MATERIAL	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (Rounded off to nearest month) + 1 MONTH AND LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON BALANCE AMOUNT FOR ONE MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL
B. FOR FOREIGN PURCHASES (IMPORTED)					
SLNO	SCOPE	COMMERCIAL TERMS	BHEL STANDARD TERM	AS OFFERED	LOADING FACTOR FOR NON COMPLIANCE TO BHEL STANDARD TERMS
B.2	SUPPLY OF EQUIPMENT INCLUDING ERECTION AND COMMISSIONING (E&C)	PAYMENT TERMS	90% PAYMENT BY WIRE TRANSFER WITH IN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF THE MATERIAL AND BALANCE 10% WITH IN 30 DAYS AFTER COMPLETION OF E&C	SAME	NIL
				SIGHT DRAFT ON PRESENTATION OF DESPATCH DOCUMENTS VIZ INVOICE, AWB ETC TO OUR BANKERS	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+6%) ON ONE MONTH PLUS PAYMENT RELATED BANK CHARGES INCURRED BY BHEL
				90 PAYMENT BY WIRE TRANSFER /LC AGAINST DESPATCH DOCUMENTS BALANCE 10% WITH IN 30 DAYS AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+6%) ON 90% OF BASIC VALUE FOR ONE MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL
				90% PAYMENT BY WIRE TRANSFER / LC AGAINST DESPATCH DOCUMENTS, BALANCE 10% AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+6%) ON THE BASIC VALUE FOR ONE MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL
				90% OF BASIC VALUE AS ADVANCE PAYMENT BY WIRE TRANSFER /LC WITH BANK GUARANTEE AND BALANCE 10% WITH IN 30 DAYS AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+6%) ON 90% OF THE BASIC VALUE FOR DELIVERY PERIOD (Rounded off to nearest month) + ONE MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL
				PART ADVANCE (X%) PAYMENT BY WIRE TRANSFER /LC WITH BANK GUARANTEE AND BALANCE (90-X)% PAYMENT BY WIRE TRANSFER /LC AFTER RECEIPT AND ACCEPTANCE OF THE MATERIAL AND 10% PAYMENT WITH IN 30 DAYS AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD(Rounded off to the nearest month) + ONE MONTH AND LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON BALANCE (90-X)% FOR ONE MONTH
				PART ADVANCE (X%) PAYMENT BY WIRE TRANSFER /LC WITH BANK GUARANTEE AND BALANCE (90-X)% PAYMENT BY WIRE TRANSFER /LC AFTER RECEIPT AND ACCEPTANCE OF THE MATERIAL AND 10% PAYMENT AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD(Rounded off to the nearest month) + ONE MONTH AND LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON BALANCE AMOUNT (100-X)% FOR ONE MONTH

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	STIPULATED OR REQUIRED GUARANTEE/ WARRANTY PERIOD (X)	AGREED	NIL	
		MINIMUM ACCEPTABLE GUARANTEE / WARRANTY PERIOD (X)	NOT AGREED FOR STIPULATED BUT AGREED FOR MINIMUM GUARANTEE/WARRANTY(Y)	LOADING @ 10 % OF THE ORDER VALUE PER ANNUM FOR THE REDUCED GUARANTEE PERIOD (X-Y)	

BHEL R&amp;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- to be communicated at Reverse Auction) 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-to be communicated at Reverse Auction) 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 :



Corp. R&D  
DIVISION  
VIKAS  
NAGAR,

RD:MPX:F-13

## Bharat Heavy Electricals Limited

HYDERABAD- 500 093 (INDIA)

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.



RD:MPX:F-14

## Bharat Heavy Electricals Limited

Corp. R&D DIVISION

VIKAS NAGAR,

HYDERABAD- 500 093 (INDIA)

### SUPPLIER REGISTRATION FORM

(FOREIGN SUPPLIER)

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 brouchers, catalogues, technical literature etc)

**6.0 ANY OTHER INFORMATION:**

SIGNATURE OF SUPPIER (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



RD:MPX:F-13

## **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**

---

### **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.

Annexure to enquiry 551500931 dated 17-Jul-2015 HPC System, LAN up gradation & AC System etc

Annexure

Supply, Installation, Commissioning and maintenance of High Performance Computing (HPC) system, LAN up gradation & AC System for CFD Lab under 5 year lease

General Terms, Conditions and Prequalification criterion

Sl No	Description	BHEL Specification	Vendor's Compliance / Please specify.
1.0	<b>General</b>	Following terms shall apply in the tender clauses wherever applicable:	
1.1	<b>Vendor</b>	The term Vendor shall apply to the successful bidder to whom contract is entered.	
1.2	<b>LESSOR and LESSEE</b>	The vendor is the LESSOR and BHEL, Corporate Research & Development (A Govt of India undertaking) is the LESSEE	
1.3	<b>Package A</b>	New High Performance Computing (HPC) Server as per detailed specification mentioned in the tender	
1.4	<b>Package B</b>	New Local Area Network System with Gigabit bandwidth as per detailed specification mentioned in the tender	
1.5	<b>Package C</b>	New Air Conditioning System as per detailed specification mentioned in the tender	

Annexure to enquiry 551500931 dated 17-Jul-2015 HPC System, LAN up gradation & AC System etc

**A: Scope of Work and Bidder's Qualification Criteria:**

SI No	Description	BHEL Specification	Vendor's Compliance / Please specify.
A.1	Scope of work	<p>1.1 COE CFD Lab at BHEL Corporate R&amp;D, Hyderabad is going to procure New HPC server (Package A), LAN system within CFD Lab (Package B) and Air conditioning system for server room within CFD lab (Package C) as per the detailed specification listed below herewith under 5 years lease basis with quarterly payment after completion of quarter.</p> <p>The bidder shall quote for all the above three packages together and will have single point responsibility for Design, Supply, Implementation, Testing, Commissioning and Training of the complete solution and maintain the system without any trouble throughout the period of 5 years of lease. (Please refer respective sections for detailed scope &amp; specification)</p> <p>a. HPC server system (Package A) shall be used for High Performance Computing (HPC) with Engineering software applications e.g. Ansys CFX, Fluent, Mechanical, Numeca etc.</p> <p>b. New LAN system (Package B) shall have Gigabit bandwidth connecting all the clients system to the new HPC server within CFD lab.</p> <p>c. New Air conditioning system (Package C) will provide cooling to the HPC system within server room of CFD lab.</p> <p>1.2 The total price shall be for the complete Scope as per technical specifications, inclusive of comprehensive on-site maintenance including repair/replacement of parts during the lease period, insurance and any other incidental charges. All applicable taxes with its prevailing rate (%) to be indicated separately.</p>	

Annexure to enquiry 551500931 dated 17-Jul-2015 HPC System, LAN up gradation & AC System etc

		<p>1.3 Bidder shall provide the manufacturer's part number for the items mentioned to meet the complete solution. Bidder should verify and certify that the items proposed are sufficient to integrate the proposed solution. Any component found deficient for system integration or short-shipment should be provided by the bidder without any additional cost.</p> <p>1.4 Bidder has to be an ISO certified company. A copy of the certificate shall be submitted along with the technical bid.</p>	
A.2	<b>Mode of Procurement &amp; Lease Period</b>	<p>2.1 Bidder should note that the total system (Package A,B &amp; C) shall be procured under 5 years lease basis with quarterly payment on completion of quarter. The lease period of 5 years will be started after the successful commissioning and acceptance of the complete system (Package, A,B &amp;C).</p> <p>2.2 BHEL reserves the right to enter into comprehensive AMC for another two years for entire system (Package A, B &amp; C) after completion of lease contract period i.e. 5 years.</p> <p>2.3 Vendor shall offer comprehensive AMC cost on per year basis as % of the total outright equipment cost without taxes in the format given in the price bid.</p>	
A.3	<b>Bidder's qualification criterion</b>	<p>Bidder should be either OEM of HPC who is willing to undertake total scope of work (Package A, B &amp; C) or an Authorized System Integrator of the OEM of the HPC to quote for this tender.</p>	
A.4	<b>Experience &amp; Customer's testimonial</b>	<p>The bidder should have executed large scale HPC infrastructure including servers, NAS storage, backup server, maintenance and monitoring for at least 3 Orders, each Order of minimum 70 cores, in the last 5 years.</p> <p>Bidder should provide customer testimonials along with Purchase Order/Work order copy with customer contact details.</p>	
A.5	<b>Submission of Authorization certificate/Letter</b>	<p>The certificate /Authorization letter supporting back to back arrangements for entire 5 years lease period from OEM of the HPC specific to this tender must be enclosed with the technical bid, without which the offer will be rejected.</p>	

Annexure to enquiry 551500931 dated 17-Jul-2015 HPC System, LAN up gradation & AC System etc

A.6	<b>System obsolescence &amp; newness certificate</b>	<p>The systems offered must be latest products from the manufacturers. Obsolete/ retired/ on the verge of obsolescence systems/ subsystems must not be offered. Products going end-of-life in 6 months from last date of tender must not be quoted. A certificate from OEM to the effect that the offered system is not obsolete and it is a new machine/equipment to be submitted.</p>	
A.7	<b>Site visit</b>	<p>In order to assess the quantum of job to be executed and to familiarize with the existing facilities, vendor may visit the CFD lab (site) before submission of the bid.</p>	

Annexure to enquiry 551500931 dated 17-Jul-2015 HPC System, LAN up gradation & AC System etc

**B. Techno-Commercial Terms and Conditions**

Sl No	Description	BHEL Specification	Vendor's Compliance / Please specify.
B.1	Submission of Bids	<p>1.1 Bidder shall submit the bid in two parts i.e. techno-commercial and price bid in separate sealed cover &amp; quote as per the Bill of Material given in the price bid. Applicable taxes to be mentioned separately.</p> <p>1.2 An un-priced bid of the offered system shall be submitted along with the technical bid with applicable taxes (%) as per price bid format enclosed.</p>	
B.2	Evaluation of the Bid	<p>2.1 The bid shall be evaluated based on the total lease rental payable for all the three packages as mentioned in the price bid format including all applicable taxes and comprehensive AMC charges for the first and second year post expiration of 5 years lease.</p> <p>2.2 BHEL's initial order will be for 5 years lease.</p> <p>2.3 BHEL reserves the right to enter into the comprehensive AMC for the entire system (package A,B&amp;C) with vendor post expiry of the lease contract for the another two years period.</p>	
B.3	Validity	The offer should be valid for 90 days from date of opening of technical bid.	
B.4	Applicable Taxes	Taxes are payable extra as per the statutory norms prevailing at the time of invoicing.	
B.5	Payment Terms	<p>5.1 BHEL payment terms for lease and AMC are on quarterly basis after completion of quarter based on the certification from the user department after deducting the downtime if any in case of lease.</p> <p>5.2 All statutory payments are the responsibility of the vendor.</p>	
B.6	Delivery	The vendor shall deliver, install and commission full system within 18 weeks from the date of placement of the order.	

Annexure to enquiry 551500931 dated 17-Jul-2015 HPC System, LAN up gradation & AC System etc

B.7	Penalty for Late delivery	<p>7.1 In the event of the delay in starting of the lease as mentioned in the delivery period, penalty shall be levied at the rate of 0.5% per week or part thereof subject to a maximum of 10% of the total basic equipment cost for the entire 5 years lease period.</p> <p>7.2 This penalty will be deducted from the first quarter rental charges, in case the penalty amount to be deducted is more than the first quarter rental charges, the same will be adjusted from the consecutive quarter(s).</p>	
B.8	ACCEPTANCE OF LOI	8.1 In the event of the placement of order, vendor has to submit order acceptance within a week time.	
B.9	Support Services	The bidder should provide 24x7 support for the HPC infrastructure, LAN & AC system. Any component equipment failed shall be replaced /replenished within 4 hrs on all days of the week.	
B.10	Retention of the system after expiry of lease term.	10.1 BHEL reserves the right to take possession of the entire HPC infrastructure (Package A, B & C) after expiry of the lease term of 5 years by payment of the terminal charges of Re 1/- per package. On payment of the terminal charges, the ownership of the entire system including all the equipment, spares, & software will get transferred to BHEL without any other payments. Maintenance of these equipment shall be with the successful bidder until the ownership is transferred to the BHEL without any extra charges for a period of not exceeding 30 days from the last date of the lease period.	
B.11	Submission of the technical literature	Complete technical literature pertaining to the products any relevant bench mark results/test results are to be submitted along with the technical offer.	

Annexure to enquiry 551500931 dated 17-Jul-2015 HPC System, LAN up gradation & AC System etc

B.12	Uptime of the HPC infrastructure	<p><b><u>12.1 Uptime for the HPC system (Package A) :</u></b> Uptime of the 99% shall be guaranteed for the HPC system i.e. Package A. Any down time beyond 1% will result in the deduction of the lease rental to be paid to the vendor on pro rata basis.</p> <p><b><u>12.2 Uptime for the LAN &amp; AC system (Package B&amp;C) :</u></b> Uptime of the 98% shall be guaranteed for the LAN &amp; AC system i.e. Package B&amp;C. Any down time beyond 2% will result in the deduction of the lease rental to be paid to the vendor on pro rata basis.</p> <p>12.3 However if the downtime of the package B&amp;C effects the performance &amp; uptime of package A (HPC system) then the downtime of clause of 12.1 shall be applicable</p>	
------	----------------------------------	---	--

<p>B.13 Downtime calculation for the service</p>	<p>13.1 Bidder shall be responsible for maintaining a minimum uptime of 99% &amp; 98% on monthly basis for Package A and Package B&amp;C respectively as mentioned in the clause 12.1 &amp; 12.2.</p> <p>Any down time above 1% (for package A) &amp; 2% (for package B&amp;C) will be subjected to the deduction of the lease rentals on following basis:</p> <p>The downtime will be calculated on hourly basis per month on 24 hours basis. Downtime will start from the time the complaint is registered with vendor or his support executive. Deduction from payments will be made for non-availability of any of the Package A, B or C during the entire lease period as detailed below:</p> <p>Deduction from payments for Package A, B &amp; C will be made on downtime of equipment (s) on daily basis in each category as per the deduction formula given. The deductions shall be from total quarterly lease rental payable for individual packages.</p> <p><b><u>Down Time for Package A (HPC system) :</u></b> The total down time allowed shall be 7.2 hrs per month (i.e. 1% of 30*24 hrs).</p> <p><b><u>Working calculation for deduction for Package A:</u></b></p> <ol style="list-style-type: none"> <li>1. Let downtime in a month = A hours</li> <li>2. Downtime percentage for HPC Server system = <math>A \times 100 / (24 \times 30) = B</math></li> <li>3. Deduction factor (D) based on the downtime % calculated i.e. B             <table style="margin-left: 20px;"> <tr> <td>(i)</td> <td>0 to 1%</td> <td>: No Deduction</td> </tr> <tr> <td>(ii)</td> <td>1% to 5%</td> <td>: 1.0</td> </tr> <tr> <td>(iii)</td> <td>5% to 10%</td> <td>: 1.25</td> </tr> <tr> <td>(iv)</td> <td>&gt; 10%</td> <td>: 1.5</td> </tr> </table> </li> <li>4. Deduction factor according to the above table = D</li> <li>5. Monthly lease charges for Package A = Package A Quarterly lease / 3 = M1 Rupees</li> <li>6. Amount of deduction for Package A per month = <math>M1 \times B \times D / 100</math> Rupees</li> </ol>	(i)	0 to 1%	: No Deduction	(ii)	1% to 5%	: 1.0	(iii)	5% to 10%	: 1.25	(iv)	> 10%	: 1.5
(i)	0 to 1%	: No Deduction											
(ii)	1% to 5%	: 1.0											
(iii)	5% to 10%	: 1.25											
(iv)	> 10%	: 1.5											

	<p><b><u>Down Time for Package B&amp;C (LAN &amp; AC system):</u></b> The total down time allowed shall be 14.4 hrs per month (i.e. 2% of 30*24 hrs).</p> <p><b><u>Working calculation for deduction for Package B&amp;C (Common formula for both package B&amp;C):</u></b></p> <ol style="list-style-type: none"><li>1. Let downtime in a month = A hours</li><li>2. Downtime percentage for Package B &amp; C = <math>A \times 100 / (24 \times 30) = B</math></li><li>3. Deduction factor (D) based on the downtime % calculated i.e. B<ol style="list-style-type: none"><li>(i) 0 to 2% : No Deduction</li><li>(ii) 2% to 5% : 1.0</li><li>(iii) 5% to 10% : 1.25</li><li>(iv) &gt; 10% : 1.5</li></ol></li><li>4. Deduction factor according to the above table = D</li><li>5. Monthly lease charges for Package B &amp; C = Package B &amp; C Quarterly lease / 3 = M2 (for package B) Rupees + M3 for Package C.</li><li>6. Amount of deduction for Package B per month = <math>M2 \times B \times D / 100</math> Rupees</li><li>7. Amount of deduction for Package C per month = <math>M3 \times B \times D / 100</math> Rupees</li></ol>	
--	---	--

Annexure to enquiry 551500931 dated 17-Jul-2015 HPC System, LAN up gradation & AC System etc

	<p><b><u>Total amount of deduction per quarter for entire system is sum of monthly downtime of individual packages.</u></b></p> <p>13.2 Downtime calculation for package A will be applicable for non-availability of server infrastructure services arising because of malfunctioning of either processors (CPUs), NAS storage, RAM, Input/ Output ports, power supply units, connecting cables etc.</p> <p>13.3 Similarly for package B i.e. LAN system, failure of switches, breaking of networking cables etc. will be counted for downtime calculations.</p> <p>13.4 Similarly for package C i.e. AC system, failure of AC system including indoor &amp; outdoor unit (compressor), gas leakage etc. shall be part of downtime calculation.</p> <p>13.5 There shall be no downtime due to the mutually agreed scheduled maintenance of equipment, infrastructure or power outage.</p> <p>Note: If the uptime for an equipment/system falls below 95% continuously for 3 months, the equipment/system shall have to be replaced by vendor within 30 days without any extra charge.</p>	
--	--	--

B.14	<b>Installation of the complete system</b>	<p>14.1 The vendor shall nominate a project manager who on behalf of the vendor shall coordinate and be responsible for all the activities related to the execution of the contract for the complete establishment of the order placed to vendor. He shall act as an interface between the vendor and BHEL.</p> <p>The project manager shall :</p> <ul style="list-style-type: none"><li>14.1.1 Carryout detailed plan for installation of Package A,B &amp; C.</li><li>14.1.2 Submit a complete layout plan for laying of networking cable (LAN) within CFD lab.</li><li>14.1.3 Submit the project schedule in consultation with BHEL.</li><li>14.1.4 coordinate for all required help and inputs necessary for the execution of the contract.</li><li>14.1.5 Carryout project monitoring as per schedule.</li></ul>	
------	--	---	--

Annexure to enquiry 551500931 dated 17-Jul-2015 HPC System, LAN up gradation & AC System etc

B.15	<b>Training</b>	<p>15.1 Training of BHEL personnel at CFD department shall be part of the contract. Advance level training shall be provided by OEM/Authorized training partner.</p> <p>15.2 During installation at BHEL, the associated BHEL coordinators shall be guided on the configuration being made and usage.</p> <p>15.3 Training on server infrastructure: A comprehensive training on Servers, Storage, backup server etc will be offered by the vendor. The training shall cover the installation &amp; configuration, analysis and trouble shooting, report generation and its analysis. Training shall cover all features of management software.</p>	
------	-----------------	---	--

Annexure to enquiry 551500931 dated 17-Jul-2015 HPC System, LAN up gradation & AC System etc

**C: Acceptance Test Plan:**

Sl No	Description	BHEL Specification	Vendor's Compliance / Please specify.
C. 1	<p><b>Acceptance Test Plan</b></p>	<p>1.1 Acceptance test would be conducted by BHEL on receipt of completion report from the vendor. The vendor shall submit project completion report to BHEL once all the three packages are installed and commissioned. All manuals, accessories etc shall be handed over by vendor to BHEL along with this report.</p> <p>1.2 The vendor shall submit the detailed documentation of HPC server O&amp;M manual, LAN cable layout, equipment location and bill of material etc prior to start of the acceptance test. The vendor shall submit these documents in soft form as well.</p> <p>1.3 For Package - A : The acceptance of the HPC facility shall be based on the benchmark testing of a problem given by BHEL for the CFD applications like Ansys CFX, Fluent, Ansys Mechanical, Numeca etc and monitoring following parameters:</p> <p>1.3.1 The performance of HPC server will be monitored by simulating test case in serial and parallel mode of server operation.</p> <p>1.3.2 The functionality and working of Backup server.</p> <p>1.3.3 The functionality of job scheduler software.</p> <p>1.3.4 The functionalities of various compilers and libraries.</p> <p>1.3.5 Functionality of Job submission portal and performance mentoring of master &amp; all compute nodes.</p>	

Annexure to enquiry 551500931 dated 17-Jul-2015 HPC System, LAN up gradation & AC System etc

	<p>1.3.6 Functionality of license analytic and reporting tool. A report generated showing license utilization should be produced and submitted.</p> <p>1.4 For Package - B: The acceptance of the LAN networking shall be based on the connectivity of the client workstation to the HPC server. The test reports for all the nodes to be submitted. The data transfer between client and server will be monitored for both upload and download conditions. During test, no loss in data connectivity shall be observed.</p> <p>1.5 For Package-C: The acceptance of AC system shall be based on complete functionality checkup of AC and its cooling effect.</p> <p>1.6 The performance of all the three systems will be observed for trouble free working for 7 days after completion of installation. This will also include the testing of all the software offered by the vendor.</p> <p>1.7 All the software offered shall be loaded completely and made functional in all respects before the start of the acceptance test by vendor. Vendor shall demonstrate all the features of the equipment/ software and show that equipment/ software are performing as per specified configuration.</p> <p>1.8 If any equipment fails/ hangs/ crashes during the acceptance test for three times, it shall be replaced by the vendor and acceptance test on the replaced equipment shall be performed afresh.</p>	
--	--	--

Annexure to enquiry 551500931 dated 17-Jul-2015 HPC System, LAN up gradation & AC System etc

**D: Termination of Lease Contract and Consequences**

SI No	Description	BHEL Specification	Vendor's Compliance / Please specify.
D. 1	<b>Termination of Contract</b>	BHEL reserves the right to terminate the order/contract, upon situations arising due to the non-compliance of contract terms & conditions of lease and unsatisfactory services.	
D. 2	<b>Fore Closure</b>	In case of foreclosure of the lease agreement, BHEL reserves the right to retain the equipment by making pro rata compensation equivalent to the basic price of the component/ equipment for the remaining quarters of the lease period & ownership of the equipment shall be transferred to BHEL.	
D.3	<b>Arbitration</b>	All disputes or differences arising under, out of or in connection with this contract shall be referred for arbitration.	
D.4	<b>Jurisdiction</b>	All disputes or differences arising out of or in connection with this contract shall be subjected to the exclusive jurisdiction of the courts having jurisdiction over BHEL Corporate R&D.	











Annexure to enquiry 551500931 dated 17-Jul-2015 HPC System, LAN up gradation & AC System etc

**Annexure 2 - Price Summary**

	Unit (No of quarters)	Total lease charges per quarter including Taxes	Total lease charges for 5 years (20 Quarters) including Taxes (Rs)
	(A)	(B)	C = A * B
1	Total Lease Rental of Package A – HPC System		
2	Total Lease Rental of Package B – LAN System		
3	Total Lease Rental of Package C – AC System		
<b>Total Lease Rental of All three Packages for 20 quarters (D) / 5 years lease Period</b>			

**Comprehensive AMC cost for all three Packages for another 2 years after completion of 5 years lease contract**

	AMC Cost as % of Total Outright Equipment price	Total AMC Cost Excluding Taxes (Rs)	Taxes (%)	Taxes (Rs)	Total AMC Cost Including Taxes (Rs)
1	Comprehensive AMC cost for all three packages - First Year				
2	Comprehensive AMC cost for all three packages - Second Year				
<b>Total AMC Cost for 2 Years (E)</b>					