



BHARAT HEAVY ELECTRICALS LIMITED

CORPORATE RESEARCH & DEVELOPMENT DIVISION

VIKASNAGAR, HYDERABAD - 500 093, INDIA

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ENQUIRY

To - Enquiry No: 550857531 Enq Date: 02-SEP-08 Due Date: 14-OCT-08 Delivery By:

Pin -

Email :

Attn .

PLEASE SUBMIT YOUR QUOTATION IN SEALED COVER SUPERSCRIBED WITH ENQUIRY NO, ENQUIRY DATE AND DUE DATE SUBJECT TO OUR TERMS AND CONDITIONS ENCLOSED, FOR THE FOLLOWING MATERIALS SO AS TO REACH US ON OR BEFORE THE DUE DATE BY 12 NOON. THE TENDERS WILL BE OPENED AT 2 PM ON THE SAME DAY

PLEASE GIVE REFERENCE OF ENQ NUMBER , ENQ .DATE AND DUE DATE IN ALL YOUR CORRESPONDENCE FOR PROMPT ACTION. IN CASE IF YOU ARE NOT MAKING THE OFFER PLEASE POST A REGRET LETTER AND RETURN THE DOCUMENTS.

SL NO	DESCRIPTION / SPECIFICATION	UNIT	QTY
1	COMPLETE SOLUTION TO UP GRADATION AND INTEGRATION OF EXISTING HIGH PERFORMANCE COMPUTING FACILITY. (16 NODE CLUSTER, 32CPU, IBM p615 PROCESSOR 64 GB, RAM, 5.3AIX OPERATING SYSTEM, etc.,) * ON 5 YEAR LEASE BASIS WITH THE ATTACHED TECHNICAL SPECIFICATION AND TERMS & CONDITIONS * FOR ANY ADDITIONAL INFORMATION ON EXISTING HPC FACILITY. CFD LAB MAY BE CONTACTED. NOTE: OVER AND AVOBE THE ATTACHED TERMS AND CONDITIONS GENERAL PURCHASE TERMS AND CONDITIONS SHALL ALSO BE FOLLOWED.	NO	1

NOTE: PLEASE SUBMIT YOUR OFFER IN TWO PARTS AS PER GENERAL TERMS AND CONDITIONS OF ENQUIRY & CONTRACT FOR THE PURCHASE OF GOODS/SERVICES SEPARATE SEALED COVERS AS DETAILED BELOW:

1) FIRST COVER SHALL CONTAIN THE FOLLOWING:

a) TECHNICAL COMMERCIAL BID ALONG WITH COMPLIANCE STATEMENTS, MENTIONING APPLICABLE DUTIES, TAXES etc., AND DELIVERY TIME CLEARLY,(TERMS,CONDITIONS, AND COMPLIANCE FORM ENCLOSED)

b) A COPY OF THE PRICE BID WITHOUT THE PRICES (UNPRICED PRICE BID)

2) SECOND COVER CONTAINING PRICE BID

3) IF THE PRICE BID IS FOUND TO BE DIFFERENT FROM THE UNPRICED PRICE BID IN ANY WAY, YOUR OFFER WILL BE REJECTED

4) UNSIGNED OFFERS ARE LIABLE FOR REJECTION

5) GUARANTEE CERTIFICATE : REQUIRED

6) MANUFACTURER'S TEST CERTIFICATE : REQUIRED

Important:

Taxes & Duties quoted by you 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. Changes in Taxes and Duties because of the changes

in Turnover etc.will also be to the supplier's account. In case no tax/duty is included, a self declaration for the exemption may be attached along with the offer.

AS WE ARE ENGAGED IN R&D ACTIVITY "C" FORM WILL NOT BE ISSUED

Yours faithfully
BHARAT HEAVY ELECTRICALS LTD

PLEASE FILL UP THE ENCLOSED VENDOR REGISTRATION FORM AND SEND IT ALONG WITH YOUR QUOTATION. OTHERWISE YOUR QUOTATION WILL NOT BE CONSIDERED. (IGNORE THIS IF YOU HAVE ALREADY SUBMITTED THIS FORM)

RAMESH G

Sr Manager

Email: gramesh@bhelrnd.co.in

UP GRADATION AND INTEGRATION OF HPC

Description:

Complete solution to Up gradation and Integration of existing High Performance Computing facility on 5 year lease basis with the following terms and conditions and technical specification:

General Terms and conditions:

Terms Used:

OEM – Original Equipment Manufacturer

Bidder – Bidder participating in the tender as per the qualification criteria

AMC – Annual Maintenance Contract

HPC - High Performance Computing.

1. Solution shall provide for High Performance Computing with CFD Applications like ANSYS CFX, FLUENT, STAR CD, NUMECA, etc.
2. Project management with single point accountability for Design, Implementation, Testing, Optimization and Training of the complete solution
3. The scope of the work shall include Racking, Stacking, Networking, Cluster Management, Cluster Toolkit implementation, Compiler /Library Configuration, etc and any other function that is required to obtain the complete solution.

A. Bidder Qualification Criteria

Bidder should be either OEM of HPC who is willing to under take total scope of work OR an Authorized System Integrator of the OEM of HPC to quote for this tender.

The system Integrator shall submit a letter of Authorization from OEM for this specific tender. The Certificate / Authorization Letter specific to this tender must be enclosed with the Technical Bid, without which the offer shall be liable for rejection.

A bidder shall submit only one bid of a single OEM.

The Bidder and the OEM has to support the HPC Infrastructure (HPC Infrastructure shall include Servers, Storage and Backup Tape Libraries) for the 5 year lease period. Bidder & the OEM shall give commitment letter in this regard. All Software Updates shall be provided on regular basis during the contract period at no extra cost. % of AMC after contract period has to be specified in the technical bid.

- I) The Bidder should have experience in Installing, Commissioning and Maintenance of HPC Infrastructure.
(The executed work under HPC Infrastructure should be of total Solution consisting of HPC installation and commissioning, Benchmarking , NAS Storage, Backup Tape Libraries along with Maintenance and Monitoring)
The Bidder should have at least 2 customer testimonial's on similar Applications from similar industry
 - II) In addition Bidder should have a minimum of 2 years of experience as on 31st March 2008 of Annual Maintenance/Lease rental contract for HPC Infrastructure projects.
- Order copies of works Executed and annual AMC/Lease Rental contract should be provided by Bidder along with the Techno-commercial Bid.**

B. Techno-Commercial Terms and Conditions

The bidder shall submit the Benchmark results of the platform offered with CFD Applications like CFX,FLUENT,etc along with the technical offer.

The offer should be valid for 180 days from date of opening Price bid.

Lease rentals quoted shall be all inclusive of the following during the lease period and shall remain FIRM without any variation till completion of the lease contract, except for lease tax if any:

- a) Freight, handling and packing charges, transit insurance, installation.
- b) On-site comprehensive maintenance
- c) On-site comprehensive Insurance covering total scope of supply and man power.
- d) Spares & Software/Firmware Updates
- e) All taxes & Duties.
- f) All other expenses not mentioned above.

Note : Any changes in lease taxes are to BHEL's account. Payment of applicable taxes and duties mentioned in the tender is on the submission of Documentary proof of actual paid by vendor, subject to the submission of the details of taxes & duties and the rate considered at the time of submission of original bid.

Comprehensive maintenance shall include the following :

- a. Replacement of faulty equipment
- b. Installation charges
- c. Site inspection charges
- d. Cost of Maintenance Engineers
- e. Supply of spares

On-site Comprehensive insurance covering total scope of supply and man power during the currency of the contract.

The bidder should provide 24x7 support for the HPC Infrastructure equipment. Any component/equipment failed shall be replaced/replenished within 4 hours on all days of the week.

Spares:

The Bidder shall ensure the availability and maintain the required spares to maintain the required uptime, during the contract period.

Lease Rentals:

Lease Rentals will commence only after successful supply, installation, integration and commissioning of the entire HPC Infrastructure equipment as per the scope of the contract. The completion of installation and commissioning shall be as per the ATP (Acceptance Test Plan) and shall be certified by BHEL.

The Supply, Installation and Commissioning shall be completed in all respects within three months from the date of Issue of Letter Of Intent (LOI).

Lease Rentals will be paid on quarterly basis, on successful completion of each quarter and on certification by BHEL.

Terminal charges to be paid at the end of the contract period is Rs.1/- (rupees one only). On payment of terminal charges, the ownership of entire System including all the equipment, spares & software will get transferred to BHEL without any other payments. BHEL reserves the right to take possession of the equipment by paying the terminal charges.

In case BHEL decides to surrender the equipment after the expiry of the contract, Bidder shall remove the equipment from BHEL premises at his own risk and cost after due permission from BHEL within a month after receiving communication in this respect.

<p>% of AMC after contract period has to be specified in the technical bid. BHEL reserves the right to enter in to AMC after the Lease Rental period.</p>
<p>Complete technical literature pertaining to the products, any relevant bench mark results/test results are to be submitted along with technical offer.</p>
<p>Uptime of 99% shall be guaranteed for the HPC Infrastructure equipment. Any down time beyond 1% in case of HPC Infrastructure will result in the reduction of lease rentals on Pro rata basis.</p>
<p>Bidder should arrange a system for registration, monitoring and redress of all HPC Infrastructure complaints during the contract period</p>
<p>Hardware upgrades during rental contract period shall provide upward compatibility.</p>
<p>The Bidder shall submit the proposed plan of execution and the methodology to execute the plan at the time of bid submission.</p>
<p>The offers shall be evaluated based on the total lease rentals for 5 years. AMC charges quoted after 5 year contract period will not be considered for evaluation, but will be binding on the bidder after lease period, if BHEL decides to place AMC order. Tender will be evaluated on lowest cost to BHEL.</p>
<p>Successful bidder shall enter into lease rental agreement with BHEL on non-judicial stamp paper of required value as per extant rules, at their own cost as per the draft agreement format which will be finalized on mutual consent.</p>
<p>DOWNTIME CALCULATION FOR THE SERVICE Bidder shall be responsible for maintaining a minimum uptime of 99% for the entire HPC infrastructure on monthly basis. Any down downtime above 1% will be subject deduction of lease rentals on following basis. The downtime will be calculated on hourly basis per month on 24 hours basis. The Management Station record/report shall be basis for Uptime and Down time calculations. Deduction from payments will be made for non-availability of HPC Infrastructure during the entire lease period as detailed below: HPC Infrastructure have been classified into following three categories Category I - Compute and master node Servers & related Software Category II - NAS Storage & related Software Category III - Backup Tape Library & related Software Downtime calculation for Server Infrastructure Services Deduction from payments for each equipment will be made on downtime of equipment(s) on daily basis in each category as per the deduction formula given below for that category; The deductions for down time shall be on the Service/maintenance component of quarterly lease rentals. The total down time allowed shall be 72 Hours per month (1% of 30*24Hours) and payment deduction is applicable if the down time is more than 3 hours in a day. Service/Maintenance component of quarterly lease amount = Rs. A For Category I If equipment is down for > 3 Hours in a day Deduction for a equipment = Rs. (A*4) / 365 For Category II If equipment is down for > 3 Hours in a day Deduction for a equipment = Rs. (A *4) / (365 x 2)</p>

For Category III

If equipment is down for > 3 Hours in a day

Deduction for a equipment = Rs. (A *4) / (365 x 3)

At the end of the contract period if any Server Infrastructure equipment is found down, final payment for the contract will be made only after system is made up.

Downtime calculation will be applicable for non-availability of Server Infrastructure services arising because of malfunctioning of either Processors (CPUs), Input/Output Ports, Power Supply Units, Connecting Cables etc.

Note:

If the uptime for an equipment falls below 99% continuously for 1 month, the equipment shall have to be replaced by the Bidder, without any extra charge.

TRAINING

Training of BHEL personnel shall be part of the contract. Advanced level training shall be provided by OEM / authorized training partner.

During installation at BHEL, the associated BHEL coordinators shall be guided on the configuration being made and usage.

Training on Server Infrastructure: A comprehensive training on Servers, Storage, Tape Libraries will be offered by the Bidder. The training shall cover the installation & configuration, Analysis and Trouble shooting, Reports generation and its analysis. Training shall cover all features of the Management software.

C. ACCEPTANCE TEST PLAN:

The acceptance of the HPC facility shall be based on the Benchmark Testing of a problem given by BHEL for the CFD Applications like CFX, FLUENT, etc.

D. Termination of Lease contract and Consequences

1.	BHEL reserves the right to terminate the order/contract, upon situations arising due to non-compliance of contract Terms & Conditions or non-performance of the equipment/system below 95% continuously for more than one month, at the risk and cost of the Bidder. On termination of the lease agreement, no lease rent shall be payable to the Bidder for the remaining period from the date of Termination.
2.	In case of the contract termination, Bidder shall remove the equipment from BHEL premises at his own risk and cost after due permission from BHEL within a month of serving notice in this respect.
3.	Fore-closure: In case of fore-closure of the lease agreement by the BHEL for reasons not attributable to the Bidder, pro-rata compensation will be payable. Compensation will be equivalent to the basic price component for the remaining quarters of the lease period and the ownership of the equipment shall be transferred to BHEL.
4.	ACCEPTANCE OF ORDER Bidder shall submit Letter of acceptance for the LOI/ Order/ Contract within one week.

Item	Description of Requirement	Qty
Fat Compute Nodes	8 Way Server – Max 4U Form Factor	8
Processor	8 Dual core Processor with Min 3.0 GHz or 4 Quad core processors with min 2.33 GHz upgradable to 8 Quad core CPU's	
Memory	64 GB RAM upgradable to 256 GB ECC DDR-2 DIMM	
Hard Disk	Min 2 x 146 GB SAS 10 K RPM Hot Swappable HDD	
Network	At least 3 x 10/100/1000Base-T Ethernet ports on board/ on PCI-E slots	
System Management	The system should come with Embedded Lights-out Management capability as a standard. Access should be possible through CLI (in-band and out-of-band), IPMI 2.0 (in-band and out-of-band), On Board IP KVM Port, SNMP (out-of-band). System should be capable to be managed through remote keyboard, video, mouse, and storage redirection. Management feature should provide Extensive control and reporting over environmental, power, hardware and BIOS/OS features. System should also support Remote diagnosis of failed components allows for rapid correction	
Management Port	Dedicated 10/100 Base-T Ethernet port and SVGA port	
Serial	One TIA/EIA-232-F asynchronous RJ45 Port	
USB	Minimum 2 USB ports	
Expansion bus	At least 3 x PCI-Express slots	
Removable Media	One DVD ROM drive	
Power Supply	Redundant, hot -swappable power supply	
Fans	Redundant hot-swappable fan modules	
Rack Mount Kit	Standard OEM Rack Mounting Kit; Cable Management arm	

Item	Description of Requirement	Qty
Master Node	2 Way Server – Max 2U Form Factor	1
Processor	2 Dual core with Min 3 GHz or 2 Quad core processors with min 2.33 GHz Processor to be same as that of Compute node.	
Memory	Min 16 GB RAM upgradable to 32 GB ECC DDR-2 DIMM	
Hard Disk	4 x 146 GB Hot Swappable SAS Disk	
Network	At least 3 x 10/100/1000Base-T Ethernet ports on board/ on PCI-E slots	
System Management	The system should come with Embedded Lights-out Management capability as a standard. Access should be possible through CLI (in-band and out-of-band), IPMI 2.0 (in-band and out-of-band), On Board IP KVM Port, SNMP (out-of-band). System should be capable to be managed through remote keyboard, video, mouse, and storage redirection. Management feature should provide Extensive control and reporting over environmental, power, hardware and BIOS/OS features. System should also support Remote diagnosis of failed components allows for rapid correction	
Management Port	Dedicated 10/100 Base-T Ethernet port and SVGA port	
Serial	One TIA/EIA-232-F asynchronous RJ45 Port	
USB	Minimum 2 USB ports	
Expansion bus	At least 3 x PCI-Express slots	
Removable Media	One DVD READ & WRITE drive	
Power Supply	Redundant Power supply	
Fans	Redundant Fan modules	
Rack Mount Kit	Standard OEM Rack Mounting Kit; Cable Management arm	

Item	Description of Requirement	Qty
Operating System	64 bit Unix/ Linux OS (should also be available preferably as Open Source) optimized for Multicore architecture	As per Cluster
Scheduler	<ul style="list-style-type: none"> • Software for Dynamic Resource Management • Dynamic resource balancing • Policy based resource allocation and hierarchical dependencies • Scheduler should have heterogeneous hardware & OS platform support • Should support any 3rd party software that is compliant and 100% compatible with the Grid Engine Open Source. • Should manage concurrent computing of existing parallel applications • Should provide an Open-SSL-based security framework • User level check-pointing to be supported. • Jobs can be moved to different resources and restarted • Accounting and Reporting tool for utilization of resources for individual project team, user, application etc... • Web based Job status monitoring. • Scheduler provided should be a commercially supported version and with Media. 	As per Cluster
Cluster Management Tool	<p>The Cluster management tool Quoted should facilitate following features:</p> <ul style="list-style-type: none"> * Web based Monitoring overall health of cluster * Add/Delete/Disable users, group * Assignment of roles to users and groups * Add/delete/install/re-install cluster nodes * Monitor cluster nodes status including drill-down of monitored events, setting of thresholds and alarms * Scheduler configuration including new/delete/disable queues, parallel Environment configuration. * Job Management including jobs submission, monitoring, deletion and tracking of status (email job complete failed status). * Cluster health reporting * Posting of notice/Message of the day by administrator 	
Libraries&Compilers	<ol style="list-style-type: none"> 1. All Standard Libraries like BLAS, LAPACK, SCALAPCK, ATLAS etc...should be part of cluster toolkit. 2. MPI and OSU MVAPICH2 for Infiniband network to be done over VAPI and Gen 2. 3. All Standard Open Source compilers like G-Fortran, GCC etc should be part of the solution. 4. The Parallel Environment to be integrated with Scheduler quoted. 	
Application	<p>Vendor must integrate the applications (CFX, Fluent, Star-CD, Ansys) with the Cluster tool and scheduler.</p> <p>Centralised user authentication for new Linux cluster and existing IBM AIX cluster.</p> <p>Single user credential & password for Linux & Existing IBM AIX server.</p> <p>User must login to same home directory irrespective of logging from Linux servers or IBM AIX servers.</p>	

Other Mandatory compliance and integration services requirements	The job scheduler must support heteroginious hardware and OS environment. Single window job queue monitor and management for Linux and AIX compute nodes. Single scheduler/queue manager for Linux & AIX compute nodes. License manager integration to scheduler. MPI configuration in Linux & AIX nodes. Integrated accounting and reporting tool with Job scheduler. Realign network route between Linux nodes, AIX nodes and storage nodes to smooth execution of job submitted thru scheduler. Single dashboard cluster monitoring for Linux cluster and AIX cluster.	
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Item	Description of Requirement	Qty
Rack	42 U closed Rack with all necessary power strips, internal cooling etc..OEM Rack only.	2

Item	Description of Requirement	Qty
Ethernet Switch (for NFS)	24 Port 10/100/1000 Ethernet Switch	1
Patch Cord	CAT 6 (2 Mtr.)	24
Jack Pannel	24 Port CAT 6 Jack Pannel	1
Infiniband Switch (for MPI communication)	IB Switch with 1U Rack Mount Form Factor	1
	Twenty-four 20Gb/s InfiniBand 4X ports	
	Auto-negotiation of port link speed	
	Ultra low latency cut-through switching (4-6 us)	
	Supports Multi-Protocol Applications for Clustering, Communication, and Storage	
	Integrated Subnet Management Agent (SMA)	
	Hot Swappable Fan Tray with Redundant Fans	
Cluster Interconnect	4X DDR Infiniband HCA (20+20Gbps), PCI-Express, Memfree with necessary cables of required length	10
Monitor	19" LCD Sliding Monitor	1
Keyboard and Mouse	Keyboard and Mouse	1
KVM Switch	24 Port KVM Switch	1

Item	Description of Requirement	Qty
Network Attached Storage	NAS	1
One 2.2 GHz AMD Opteron		
4 GB DDR1/400 ECC registered DRAM		
Four standard 10/100/1000BaseT Ethernet ports		
Two USB ports		
Five internal PCI-X 64 bit (three available for expansion)		
Two standard dual-port 2 Gb/sec FC HBA		
NAS OS–storage-optimized operating system		
64-bit journaling file system; checkpoints, online extensible/expandable capacity, NTFS streams support;		
CIFS/SMB, NetBIOS, NFS v2 and v3, FTP		
Capacity 16 Fiber Channel 146 GB 15K RPM discs		
Power supply dual redundant		
Internal discs – 2.3 TB Raw		
Dual Smart Array RAID Controller with 512 MB RAID Cache Hardware RAID, battery-backed RAID		

Item	Description	Quantity
	Tape Library Autoloader with Back up software	
	Autoloader should be configured with 1 Nos. of FC LTO 4 Drive	1
	Autoloader should support LTO 2, LTO 3 and LTO 4 Drives	
	Autoloader should support Ultra 320 SCSI LVD, 4-Gb/s native FC Interface	
	Autoloader should have at least 24 slots	
	Autoloader should be scalable to 2 Drives	
	The data transfer rate of Tape drive should be at least 120 MB/s.	
	The Autoloader should have highly reliable distributed robotic architecture with MSBF of 2 million robot load/unload cycles	
	The Mean time between failure (MTBF) of the offered Autoloader should not exceed 100,000 hours	
	The Mean time to repair (MTTR) <30 min of the offered Autoloader should be within 30 min	
	The Autoloader should have heterogeneous platform support.	
	The offered Autoloader should have FC - HBA	
	The Backup software to be given for backing of NAS device asked in the specifications (only NAS device is to be backed up)	



BHARAT HEAVY ELECTRICALS LIMITED

CORPORATE R&D DIVISION, VIKAS NAGAR, HYDERABAD – 500 093, AP, India

Ph: 0091-40 – 23778474, FAX: 0091-40 – 23770698

General Terms and Conditions of Enquiry & Contract for the Purchase of Goods/ Services

1. The quotation and any order resulting from this enquiry shall be governed by these General Terms and Conditions of enquiry and contract for the supply of goods and the supplier quoting against this enquiry shall, unless specifically stipulates any different terms or conditions, be deemed to have read and agreed to the same.
2. Sealed quotations in double cover with tenderer's distinctive seal, superscribing enquiry number, date and due date are to be submitted so as to reach on or before due date & time, addressed to **Additional General Manager(MM), Bharat Heavy Electricals Limited, Corporate Research & Development Division, Vikasnagar, Hyderabad, Andhra Pradesh, India – PIN-500 093, India.**

In the case of **Two-part bid**, each inner cover shall clearly be labeled as a) **Technical & Commercial Bid** containing technical data/ drawings/ catalogues/ quality plans along with commercial terms and conditions & copy of the price bid with the price columns left blank (unpriced price bid), b) **Price bid** containing prices quotes. Installation and/or Commissioning charges shall be spelt out in absolutely lucid terms, 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 price bid in any way, the offer will be rejected summarily.**

3. **Tender/ Technical bid Opening:** Unless specified otherwise, tenders/ technical bids will be opened on appointed date and time as mentioned in the enquiry or as communicated changed date/time, if any, in the presence of such of those tenderers who may be present.
4. **Delayed/ Late Tender:** Tenders, which have been posted by registered post through the postal department in time before opening date but received after tender opening, shall be treated as regular tenders. Other tenders received after tender opening time shall be treated as late tenders and normally they may be rejected.
5. The Quotation should be free from overwriting and erasures. Corrections and additions, if any, must be attested. Supplier should indicate in the quotation dimensions (Size), weight, rate etc., in the metric system unless the enquiry calls for different unit.
6. **Validity of Quotation:** All quotations shall be kept open for acceptance for a period of ninety days from the date of opening of Tenders/ Technical bid and this shall be deemed to be an express condition of all quotations. The rate shall be quoted in both figures and in words.
7. In the case of Two-part bid, the vendor should furnish technical 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.
8. **Revision of Pricebid:** In the event of any bidder, after finalizing the technical specifications and scope of supply, opting to revise and submit their latest price bid, then BHEL reserves the right to open their original / previous price bid also while evaluating revised bid.
9. **Pricebid Opening:** Unless specified otherwise in the enquiry, the Price bids of technically qualified vendors shall be opened with prior intimation in the presence of such of those tenderers who may be present.
10. **Conformity to Specifications:** The material should be of the best quality and shall be conforming to our specification given in our enquiry. Unless otherwise agreed upon by BHEL, no payment shall be due by BHEL in respect of any sample. Offers without details of specifications/ applicable catalogues will not be considered and are liable to be rejected.
11. **Terms of Delivery:** All suppliers shall quote the lowest prices on ex-works and FOB/FCA basis. Foreign suppliers will also indicate their Indian agent's name and address with percentage of agency commission out of the quoted price, if any. Name and Address of the supplier's Bankers address should also be given. Indian suppliers for the indigenously manufactured/ imported stock shall quote on Ex-works /Free-on-Rail/Road /FOR-destination basis, indicating packing & forwarding charges, if any, separately.
12. **Taxes and Duties:** Unless specified otherwise in the enquiry, BHEL do not provide "C" or "D" Form as it is engaged in R&D. All Indian suppliers shall clearly mention 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. It will be paid

only if Registration Number under State(TIN)/ Central Sales Tax or Service Tax is specifically mentioned in the Bill/Invoice. Vendors without a Sales Tax/VAT registration and applicable Service Tax registration will not be considered.

13. **Insurance:** Insurance will be arranged by BHEL in case of Ex-Works as well as FOB basis supplies.
14. **Terms of Payment:** Full payment will be made within 30 days after receipt, inspection and acceptance of the material (and where involved, Erection and commissioning of the material/ equipment at BHEL/Destination) by Crossed cheque and no Bank commission charges are admissible. The Cheque will be sent by registered post and BHEL is in no way responsible if loss occurs due to delay by postal authorities and cheques falling into improper hands or through forgery or fraud. Suppliers having RBI-SEFT-enabled accounts can seek payment through Electronic Fund transfer. For foreign suppliers, the preferred payment term will be on Sight Draft basis and bank charges inside India will be to BHEL account and outside India will be to supplier's account.
15. Suppliers shall quote competitive price and best delivery for all the items mentioned in the enquiry. BHEL reserves the right to reject partial quotations and to place order on overall landed cost basis. Correct date of effecting supplies in the event of an order should be indicated in the offer. If the supplier's quoted terms are different from BHEL standard payment terms, interest @10.5% per annum (or as indicated in the enquiry) will be loaded to the quoted prices for difference of payment period.
16. **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 and indicate packing charges, if any, separately.
17. **Part/ Split Ordering:** BHEL reserves right to Order part of the item/ quantity of the enquiry and split the order among qualified vendors.
18. 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 true copy of Rate contract signed by the supplier should be sent with the quotation.
19. **Inspection:** On receipt, the goods shall be subjected to inspection and also test, if necessary, and our decision regarding the acceptability of the goods shall be final and binding on the suppliers.
20. **Consequences of Failure To Deliver:** The time stipulated for delivery of goods shall be deemed to be the essence of the contract and delivery must be completed within the stipulated date/s. In the event of supplier's failure to supply the goods by the stipulated date/s, BHEL shall be entitled to levy a penalty of ½% per week for the delayed no of weeks or part thereof for the undelivered portion of PO subject to a maximum of 10% total order value.
21. **Withdrawal from the Contract:** 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 incidental to the breach of contract on the part of the supplier.
22. **Guarantee/ Warranty certificate and Manufacturer's Test report:** Invariably in all cases where it is so stipulated, the supplier should furnish Guarantee/ Warranty certificate valid for a period of 18 months from date of supply or 1 year from the date of receipt, acceptance and commissioning(or more, if provide by oem) whichever earlier and manufacturer's Test report along with the goods, failing which, BHEL shall have the right to reject the goods.
23. All ferrous/ non-ferrous items shall be colour coded as per bureau of Indian standards/ or IS standards/ BHEL Standards.
24. **Recovery of Dues:** BHEL shall recover any amount due from the supplier or any amount outstanding to the credit of the supplier with BHEL R&D unit or any other BHEL unit(s) and/or by legal action.
25. **Arbitration & Forum for Legal Proceedings:** All disputes arising in connection with indigenous/ foreign supplies shall be settled through arbitration held at Hyderabad, AP, India and arbitration shall be appointed by Arbitration Tribunal of the Federation of Andhra Pradesh Chambers of Commerce and Industry, Hyderabad, AP, India. The Courts at Secunderabad/ Hyderabad, AP, India shall have jurisdiction in respect of any suit or other legal proceeding arising from or relating to this contract

The rights and remedies of BHEL stated in these General terms and conditions shall be in addition and supplemental to its rights and remedies under law and custom or usage of trade or business and shall in no way be deemed to limit, curtail, supercede or derogate from its said rights and remedies.



ANNEXURE “AA
BHARAT HEAVY ELECTRICALS LIMITED
CORPORATE RESEARCH & DEVELOPMENT DIVISION
VIKASNAGAR, HYDERABAD – 500 093. INDIA

MATERIALS MANAGEMENT DEPARTMENT
(Information for Technical & Commercial bids with general terms)

ENCLOSURE TO ENQ No:

DATE:

- a) Please indicate() for applicable or () for not applicable against each clause of the enquiry
- b) Vendor shall confirm their compliance for applicable clauses () in their offer without deviation.

1) Technical offer:-

- a) Vendors to confirm compliance to all points of specifications, attached if any. Deviations if any should be specified in the offer.
- b) Vendors shall furnish relevant technical Documents / Catalogues. Drawings and Quality plan duly taking care of Purchase Specification and Quality requirements along with their offer in duplicate for Purchaser’s review / Verification.

2) Two Part Bid:-

Vendor shall submit their offer in 2 parts.

2.1 Technical Bid:- Containing relevant technical data, drawings, catalogues, Quality Plan etc, along with Commercial Terms and Conditions and a copy of the price bid with the price columns left blank (unpriced price bid). If the price bid was found later to be different from the unpriced price bid in any way, the offer will be rejected.

2.2 Price Bid:- Containing the Price(s) quoted. Installation and or commissioning charges shall be spelt out in absolutely lucid terms taking into account the total charges rather than quoting vaguely such as charges as per man day or charges per Engineer per day etc.,

Technical bids will be opened on the due date of the enquiry or any other date fixed by BHEL. Further, vendor should furnish clarifications, if any, required within seven days after the same is sought by Purchaser. If no clarifications/reply received within 7 days, it will be construed that vendor is not interested in the tender and Purchaser will finalise tender accordingly. Price bids received on due date along with technical offers will be recorded and opened subsequently with due intimation to vendors after finalising of technical scope of supply.

These bids shall be submitted in separate sealed covers superscribing the nature of the offer (technical bid or price bid). BHEL Enq No. Due date etc.

Note: In case of non-compliance with the TWO_-PART-BID ie.. clause number 2 and subclauses 2.1 and 2.2. Purchaser reserves the right to summarily reject all such offers.

3) Delivery:-

Vendor shall confirm supply of materials as per the delivery schedule indicated in the enquiry.

4) Negotiations:-

Vendor shall quote competitive price and best delivery to avoid negotiations.

5) Commercial Terms & Conditions:-

Terms of Delivery:

- a) **Vendors shall clearly indicate terms of delivery Viz: Ex-Works/FOR Despatching station/FOR Despatching station FOR Destination/FOB port of loading/FAS Port of loading in their offer. If the terms of delivery is Ex-Works, then vendors shall clearly indicate the following:**
 1. **Packing and forwarding charges.**
 2. **Documentation / Handling charges if any**
 3. **FOB FAS charges (Inland Freight & Insurance charges from vendor works to port of Loading).**
- b) **All Indian Vendors shall clearly specify the Excise Duty in percentage applicable for their supplies. Offers containing expressions such as “Extra as applicable” or “As applicable at the time of Delivery” will be summarily rejected.**
- c) **CST/Local Sales Tax in percentage shall be clearly indicated.**

6) Validity of Quotation:-

Validity of offer should be 90 days after the opening of price bid.

7) Part or split ordering:-

Purchaser reserves the right to order part of item / quantity of the enquiry.

8) For clauses not mentioned in this document see the enclosed “GENERAL TERMS AND CONDITIONS OF ENQUIRY AND CONTRACT FOR THE PURCHASE OF GOODS”

- 9) **In case your terms of payment are different from our standard payment terms, interest at the rate of 10.5% per annum (or BHEL’s standard rate of interest) will be loaded to your prices for the difference of period of payment.**



BHARAT HEAVY ELECTRICALS LIMITED
CORPORATE R&D Division
Vikasnagar, Hyderabad – 500093, India.

Suppliers' compliance statement to basic conditions of enquiry

(In case Order to be placed on Indian supplier in Indian currency)

Condition	BHEL R& D's terms	Supplier's compliance (indicate Yes/No. if 'No', state terms desired)
1) Validity of offer	90 days from the tender opening date	
2) Delivery requirements	Free delivery at our stores or FOR destination (as indicated in the enquiry)	
3)Warranty	Unless specifically mentioned in the enquiry, all supplied items to be provided with warrantee for one year (or more, if provided by the OEM) from the date of acceptance/commissioning. In case of equipment involving erection and commissioning, warrantee shall be for 18 months from the date of dispatch or 12 months from the date of commissioning, whichever is earlier	
4) Terms of payment	Full payment will be made within thirty days after receipt, inspection and acceptance of the material at BHEL R&D (and where involved, erection and commissioning of the material/equipment at BHEL/destination), by Crossed Cheque and no Bank commission charges are admissible.	
5) Taxes & Duties	Unless specifically mentioned in the enquiry, we do not provide 'C' or 'D' form. Supplier to specify rates of taxes and duties element wise and related percentages.	
6) Penalty for late delivery	0.5% per week beyond the delivery date as mentioned in the Purchase order on undelivered portion subject to a maximum of 10% of the total order value	

* BHEL R&D reserves the right to reject any offer due to non-compliance with the above conditions and/or non-receipt of this form in duly filled condition

* Any other elements of cost in addition to the above may please be specified in detail

(Signature and Stamp/Seal of Vendor)



BHARAT HEAVY ELECTRICALS LIMITED
CORPORATE R&D Division
Vikasnagar, Hyderabad – 500093.

IMPORTED

Suppliers' compliance statement to basic conditions of enquiry

(In case Order to be placed on the Principal and foreign currency)

Condition	BHEL R& D's terms	Supplier's compliance (indicate Yes/No. if 'No', state terms desired)
01) Validity of offer	90 days from the tender opening date (or as per enquiry)	
02) Delivery requirements	FCA – Nearest International Airport (or as indicated in the enquiry)	
03) Warranty	Unless specifically mentioned in the enquiry, all supplied items to be provided with warrantee for one year (or more, if provided by the OEM) from the date of acceptance/ commissioning. In case of equipment involving erection and commissioning, warrantee shall be for 18 months from the date of dispatch or 12 months from the date of commissioning, whichever is earlier	
04) Terms of payment	Sight draft. All bank charges inside India will be to BHEL R&D account and out side India will be to suppliers account. Documents through State Bank of India, HAL Complex, Balanagar, Hyderabad, AP, India-500 042.	
05) Agency commission	PI specify percentage charges, if any. Indian agency/agent commission will be in Indian Currency only.	
06) Erection/ Commission	As per enquiry	
07) Documentation	As per enquiry	
08) Insurance	BHEL will arrange Insurance based on intimation to our Insurance agency, United India Insurance Co., DO-2, Secunderabad, AP, India.	
09) Penalty for late delivery	0.5% per week beyond the delivery date as mentioned in the Purchase order on undelivered portion subject to a maximum of 10% of the total order value	

* BHEL R&D reserves the right to reject any offer due to non-compliance with the above conditions and/or non-receipt of this form in duly filled condition

* Any other elements of cost in addition to the above may please be specified in detail

(Signature and Stamp/ Seal of Vendor)



BHARAT HEAVY ELECTRICALS LTD.
Corp. R&D DIVISION
VIKAS NAGAR,
HYDERABAD-500 093 (INDIA)

VENDOR REGISTRATION FORM
[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 & 1.2 Name and address of the vender: _____

Phone Nos.:

Fax No.:

Email:

1.4 Local representative of the vender in India/ Hyderabad:

Phone Nos.:

Fax No.:

Email:

Contact person:

Mobile No.:

2.0 & 2.1 Type of Organisation:

PROPRIETORSHIP	COMPANY	SISTER CONCERN	ANY OTHER (Please specify)
PARTNERSHIP	CORPORATION	Small Scale Industry	

3.0 Annual Turn Over:

Name and address of the Banker:

Sr.No.	Bank	Address

4.0 REGISTRATION PARTICULARS

4.1 IT Permanent Account No.(PAN):

4.2 & 4.3 State and central sales tax Registration No.:

4.4 ED/ Service Tax Registration No.:

PF Account No.:

Labour Licence No.:

ESI Account No.:

5.2 Contact person:

Mobile No. :

5.3 Total Number of employees:

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

6.0 Wish to register for supplies/ services other than one bidding for :

<u>Sr.No.</u>	<u>Service/Supplies</u>	<u>Capacity</u>
<u>1</u>		
<u>2</u>		
<u>3</u>		
<u>4</u>		
<u>5</u>		
<u>6</u>		
<u>7</u>		

6.1 Reference list :

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

<u>Sr.No.</u>	<u>Customer</u>	<u>Volume / Year</u>
<u>1</u>		
<u>2</u>		
<u>3</u>		
<u>4</u>		
<u>5</u>		
<u>6</u>		
<u>7</u>		

7.0 & 8.0 Infrastructure / facilities :

<u>Sr.No.</u>	<u>Facility (with specifications)</u>	<u>Age/ Year procured</u>
<u>1</u>		
<u>2</u>		
<u>3</u>		
<u>4</u>		
<u>5</u>		
<u>6</u>		
<u>7</u>		
<u>8</u>		
<u>9</u>		
<u>10</u>		

9.0 Registration with other BHEL Unit/Units:

<u>Sr.No.</u>	<u>9.1.1 Unit</u>	<u>9.1.2 Registration No.</u>
<u>1</u>		
<u>2</u>		
<u>3</u>		
<u>4</u>		

Any Other information :

Declaration:

The information furnished above is true and authentic.

(CEO / Proprietor)

SEAL:

Date:

The competent authority reserves the right to accept or reject the registration. Registered vendors will be informed by mail / email, as convenient. Contact Sr.DGM (MM) for clarification/ additional information on registration.
A separate communication will be sent to you in case of non-registration, citing reasons thereof.

Instructions

1. Answer all items, use NA for items not applicable.
2. BHEL units do not require this registration.
3. Submit the form in duplicate.
4. Use additional sheets for want of space if required.
5. Attach copies of latest documents in respect of items 4.0 (Registration no.s)
6. Photographs of registered office and the chief executive/proprietor shall be furnished.
7. Use A4 sheets for this document and the enclosures.

* REGISTERED BIDDERS, HAVING BHEL (R&D) REGISTRATION NO./ HAVE SUBMITTED THIS FORMAT EARLIER, NEED NOT FURNISH THIS INFORMATION SECOND TIME (UNLESS DESIRE TO UPDATE IT).



BHEL CORPORATE R & D
VIKAS NAGAR- HYDERABAD - 500 093
ANDHRA PRADESH – 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

NOTE: PLEASE ATTACH SEPARATE SHEETS, IF SPACE FOUND IS INADEQUATE

AUTHORISED SIGNATORY



BHEL CORPORATE R & D
VIKAS NAGAR – HYDERABAD – 500 093
ANDHRA PRADESH – INDIA

SUPPLIER REGISTRATION FORM

(FOREIGN SUPPLIER)

- 1.6 CONTACT PERSON(S)
FOR PRODUCT OFFERED
NAME(S)
OFFICIAL CAPACITY
ADDRESS:
TELEPHONE
FAX
E-MAIL
- 1.7 YEAR OF ESTABLISHMENT
- 1.8 PRODUCTION CAPACITY PER ANNUM
- 1.9 PARTICULARS OF PRODUCT INCLUDING
SPECIFICATION AND RANGE OFFERED
FOR REGISTRATION
(ATTACH BROCHERS AND CATALOGUE)
- 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 AUTHORISATION LETTER
- 1.15 ANY OTHER INFORMATION:

AUTHORISED SIGNATORY



BHEL CORPORATE R & D
VIKAS NAGAR – HYDERABAD – 500 093
ANDHRA PRADESH – INDIA

SUPPLIER REGISTRATION FORM

(FOREIGN SUPPLIER)

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 SUPPLIER

NAME

DESIGNATION

DATE

.....OFFICIAL SEAL

AUTHORISED SIGNATORY
