



BHARAT HEAVY ELECTRICALS LIMITED

CORPORATE RESEARCH & DEVELOPMENT DIVISION

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RD:DP:MPX:F-04

ENQUIRY

To - Enquiry No: 540804131 Enq Date: 10-NOV-08 Due Date: 09-DEC-08 Delivery By: 15-JAN-09

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	SUPPLY OF HIGH PERFORMANCE CONTROLLER WITH I/O ACCESSORIES AS PER ENCLOSED SPECIFICATIONS	SET	1

Please submit your offer in Two parts as per enclosed "General Terms and Conditions of enquiry & Contract for the purchase of Goods/ Services" in separate sealed covers as detailed below:

- 1) First cover shall contain a) Technical & Commercial bid, b) Compliance Statement, c) Un-priced Price bid, i.e. a copy of the Price bid with the price(s) columns left blank, d) Vendor registration form
- 2) Second Cover containing Price bid.

Note:

1. If the Price bid is found to be different from the un-Priced Price bid in any way, the offer will be rejected.
2. Unsigned offer(s) are liable for rejection.
3. Taxes & Duties quoted will be taken for cost evaluation & order placement and no change will be entertained later except in the case of changes made by the Government.
- 4) Changes in Taxes and Duties because of the changes in Turnover etc. will be to the supplier's account.
- 5) In case any Taxes/duties exempted, a self declaration for the same may be attached to the offer.
- 6) As we are engaged in R&D activity, "C" Form will not be issued.
- 7) Please fill-up the enclosed Vendor registration form and send it in advance seeking registration as vendor or enclose it with Technical bid, failing which your offer will not be considered (Kindly enclose a copy of it if you have already submitted this form).

Yours faithfully
for
BHARAT HEAVY ELECTRICALS LTD

PRASAD RAO DRKV

Engineer

Email: drkvprasad@bhelrnd.co.in

***Technical Specifications
For Supply of
High Performance Controller with I/O
Accessories***

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1.0. The High Performance Controller with I/O accessories is intended for use in establishing Control Loop Test Facility at BHEL Corp. R&D, Hyderabad.

SECTION – I

ELIGIBILITY CRITERIA FOR OFFERS / QUOTATIONS

1.1 Terms & Conditions :

To qualify for technical bidding, given in subsequent section, the following requirements are to be met by the Supplier failing which their Offer will NOT be considered.

- 1. OEMs and only those Agents authorized by OEMs are requested to quote against to this Enquiry. Agents are requested to enclose Authorization Letter from their OEM along with their Offer, failing which such offers shall be rejected.**
- 2. Supplier should quote for the entire Scope including the items given as Optional. Part offer(s) will NOT be considered. However, BHEL reserves the right to procure or not to procure the items listed as Optional.**
- 3. Technical Offer should contain copy of this document. Supplier to clearly give their compliance / remarks against each clause / item in all sections. Also supplier should clearly indicate any deviations. Acceptance of these deviations is subject to BHEL approval.**

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4. Supplier to **indicate the Make and Model No. enclosing the Technical Catalogs / Selection Guide / Manuals / OEM Documentation** for each item.
5. Supplier to **give the Commercial (Price) Bid for all materials as per BOM given in Section III. Unit Rates are to be quoted** for all the items. Further, **all taxes and duties are to be clearly indicated. However it should be noted that NO PRICES ARE TO BE MENTIONED in BOM to be attached with this copy (i.e. in the Technical Bid as per Two Bid Procedure). Only quantities are to be indicated in this copy.**
6. Supplier should include **minimum Eighteen Months Warranty** for Electronic Hardware from delivery at BHEL Corp. R&D, Hyd. Supplier to indicate BHEL Corp. R&D as End User. Warranty certificates should be handed over to BHEL at the time of supply.
7. Supplier to enclose Test / Calibration Certificate along with the material wherever applicable. Supplier to indicate BHEL Corp. R&D as End User.
8. Supplier to **indicate / recommend spares, tools and tackles if any, and quote for them as “OEM RECOMMENDED SPARES”**. These items shall be **treated as optional** items and **BHEL reserves the right to procure or not procure these items.**

1.2 Supplier's Remarks :

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SECTION – II

DETAILED TECHNICAL SPECIFICATIONS

2.1 High Performance Controller :

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	Make	M/s National Instruments (NI) or NI Compatible (Supplier to indicate Model No. along with the necessary documents)	
2	Architecture	Suitable to PCI eXtensions for Instrumentation (PXI) based Architecture	
3	Processor	Intel Core 2 Duo Processor T7400 (2.16 GHz) or better	
4	Chipset	Mobile Intel 945GM Express chipset or better	
5	RAM	Min. 2 Nos. SO-DIMM sockets, DDR2 SDRAM, PC2 5400, dual channel 512 MB (1 x 512 DIMM) Min.	
6	Hard drive	60 GB Minimum, internal, Serial ATA 1.0 interface	
7	Ethernet	Min 1 No. with 10/100/1000BASE-TX, RJ45 connector	
8	Video	Intel GMA 950 graphics media accelerator, DVI-I connector or better	
9	Serial	Min. 1 No. (RS232)	
10	GPIB	Min. 1 No. PCI-GPIB/TNT, micro D25 connector IEEE 488 and HS488 transfers (adapter cable not included)	
11	USB ports	Min 4 Nos.	
12	Compatibility	Fully compatible with PXI Specification 2.0	
13	Operating Temperature	5 to 50 °C or better	
14	Relative Humidity	10 to 90% Non Condensing or	

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	(Operating)	better	
15	Usage Area	For indoor use only	
16	Pollution degree	2	
17	Storage Temperature	-40 to 65 °C or better	
18	Relative Humidity (Storage)	5 to 95% Non Condensing or better	
19	Safety Compliance	EN 61010-1, IEC 61010-1, UL 61010-01, CSA 61010-1 or better	
20	Built-in microsecond hardware timing	Required	
21	Watchdog/trigger SMB	Required	
22	RTOS	NI LabVIEW Real Time Module or NI Compatible RTOS (Controller should be able to run “.vi files” in it)	

2.1.1 Note :

1. GPIB & USB Connectivity shall be treated as “Optional Features” (Refer Clause 2 of Section I, Subsection 1.1).

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2.2 Analog Input Module for Voltage :

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	Make	M/s National Instruments (NI) or NI Compatible Industrial Grade (Supplier to indicate Model No. along with the necessary documents)	
2	Bus Interface	PXI	
3	Channel type	Voltage input for DC (Bank Isolation)	
4	Number of channels for Voltage Input (VI)	8 differential or higher	
5	ADC resolution (VI)	16 bits DNL no missing codes	
6	Input range (VI)	± 10 V, ± 5 V, ± 1 V, ± 0.2 V DC	
7	Sampling rate Maximum (VI)	250 kS/s or better	
8	Timing resolution (VI)	50 ns or better	
9	VI CMRR (DC to 60 Hz)	95 dB or better	
10	Input coupling (VI)	DC	
11	Data transfers (VI)	DMA (scatter-gather), interrupts, programmed I/O	
12	General-Purpose Counter/Timers	Resolution of 32 bits or better	
13	Analog Output	Number of channels Min. 2 Channel type Voltage output DAC resolution of 16 bits with DNL ± 1 LSB, Output range of ± 10 V, Output coupling DC, Data transfers as with VI	
14	Digital I/O	Number of Input channels Min. 6, Number of Output channels Min. 4 with 24V DC Sourcing, Direction control Fixed, lines are unidirectional DO Source	
15	Operating Temperature	0 to 50 °C or better	
16	Relative Humidity (Operating)	10 to 90% Non Condensing or better	
17	Usage Area	For indoor use only	

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18	Pollution degree	2	
19	Storage Temperature	-40 to 70 °C or better	
20	Relative Humidity (Storage)	5 to 95% Non Condensing or better	
21	Safety Compliance	EN 61010-1, IEC 61010-1, UL 61010-01, CSA 61010-1 or better	
22	Electromagnetic Compatibility	EN 61326 EMC requirements; Minimum Immunity • EN 55011 Emissions; Group 1, Class A • CE, C-Tick, ICES, and FCC Part 15 Emissions; Class A or better	
23	Accessories	a) Connector Block	
		b) Cable to connect Module to Connector Block	

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2.3 Analog Input Module for Current :

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	Make	M/s National Instruments (NI) or NI Compatible Industrial Grade (Supplier to indicate Model No. along with the necessary documents)	
2	Bus Interface	PXI	
3	Channel type	Current input (Bank Isolation)	
4	Number of channels Current Input (CI)	8 differential or higher	
5	ADC resolution (CI)	16 bits DNL no missing codes	
6	Input range (CI)	±20 mA DC	
7	Sampling rate Maximum (CI)	250 kS/s or better	
8	Timing resolution(CI)	50 ns or better	
9	Input coupling (CI)	DC	
10	Data transfers (CI)	DMA (scatter-gather), interrupts, programmed I/O	
11	General-Purpose Counter/Timers	Resolution of 32 bits or better	
12	Analog Output	Number of channels Min. 2 Channel type Voltage output DAC resolution of 16 bits with DNL ±1 LSB, External Power Supply +10 - 30V DC, Output coupling DC, Data transfers same as CI	
13	Digital I/O	Number of Input channels Min. 6, Number of Output channels Min. 4 with 24V DC Sourcing, Direction control Fixed, lines are unidirectional, Debounce selectable per input	
14	Operating Temperature	0 to 50 °C or better	
15	Relative Humidity	10 to 90% Non Condensing or better	
16	Usage Area	For indoor use only	
17	Pollution degree	2	

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18	Storage Temperature	-20 to 70 °C or better	
19	Safety Compliance	EN 61010-1, IEC 61010-1, UL 61010-01, CSA 61010-1 or better	
20	Electromagnetic Compatibility	EN 61326 EMC requirements; Minimum Immunity • EN 55011 Emissions; Group 1, Class A • CE, C-Tick, ICES, and FCC Part 15 Emissions; Class A or better	
21	Accessories	a) Connector Block	
		b) Cable to connect Module to Connector Block	

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2.4 Analog Output Module :

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	Make	M/s National Instruments (NI) or NI Compatible Industrial Grade (Supplier to indicate Model No. along with the necessary documents)	
2	Bus Interface	PXI	
3	Channel type	Current Output Sourcing type without External Power Source	
4	Number of channels Current Output (CO)	16 or higher	
5	Resolution (CO)	16 bits DNL \pm 1 LSB Max.	
6	Output range (CO)	+ 0 to 20 mA DC	
7	Protection (CO)	Short-circuit and Open circuit	
8	Power-up state (CO)	Independent, user-defined values	
9	Number of channels Voltage Output (VO)	16 or higher	
10	Resolution (VO)	16 bits DNL \pm 1 LSB Max.	
11	Output range (VO)	\pm 10V	
12	Number of channels Current Output (CO)	16 or higher	
13	Output Coupling (VO)	DC	
14	Protection (VO)	Short-circuit to ground	
15	Digital I/O	Number of channels Min. 8, TTL Compatibility	
16	Operating Temperature	0 to 50 °C or better	
17	Relative Humidity	5 to 90% Non Condensing or better	
18	Usage Area	For indoor use only	
19	Pollution degree	2	
20	Storage Temperature	-20 to 70 °C or better	
21	Safety Compliance	EN 61010-1, IEC 61010-1, UL 61010-01, CSA 61010-1 or better	
22	Electromagnetic	EN 61326 EMC requirements;	

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	Compatibility	Minimum Immunity <ul style="list-style-type: none">• EN 55011 Emissions; Group 1, Class A• CE, C-Tick, ICES, and FCC Part 15 Emissions; Class A or better	
23	Accessories	a) Connector Block	
		b) Cable to connect Module to Connector Block	

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2.5 Digital I/O Module :

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	Make	M/s National Instruments (NI) or NI Compatible Industrial Grade (Supplier to indicate Model No. along with the necessary documents)	
2	Bus Interface	PXI	
3	Number of channels for Contact Sensing (DI)	24 or higher optically-isolated (each with its own ground reference isolated from other channels)	
4	Input range (DI)	- 60 V to + 60 V DC	
5	Number of channels for Relay / Connector Powering at the field (DO)	24 or higher solid-state relay output channels (each with two terminals that are isolated from other channels)	
6	Relay type (DO)	Normally open form A solid-state relays	
7	Max switching voltage (DO)	30 Vrms (42 V peak) for AC 60 VDC for DC and Max switching capacity 150 mA or better	
8	Common-mode isolation (DO)	60 VDC 30 Vrms (42 V peak) (channel-to-channel and channel-to-computer) or better	
9	Relay set / reset time	(max) 5.0 ms or better	
10	Operating Temperature	0 to 55 °C or better	
11	Relative Humidity (Operating)	10 to 90% Non Condensing or better	
12	Usage Area	For indoor use only	
13	Pollution degree	2	
14	Storage Temperature	-20 to 70 °C or better	
15	Relative Humidity (Storage)	5 to 95% Non Condensing or better	
16	Safety Compliance	EN 61010-1, IEC 61010-1, UL 61010-01, CSA 61010-1 or better	
17	Electromagnetic Compatibility	EN 61326 EMC requirements; Minimum Immunity • EN 55011 Emissions; Group 1,	

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		Class A • CE, C-Tick, ICES, and FCC Part 15 Emissions; Class A or better	
18	Accessories	a) Connector Block	
		b) Cable to connect Module to Connector Block	

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2.6 Chassis :

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	Make	M/s National Instruments (NI) or NI Compatible Industrial Grade (Supplier to indicate Model No. along with the necessary documents)	
2	Bus Interface	PXI	
3	PXI Slots	Min. 8 with Min. 7 Slots for Peripheral PXI	
4	AC input voltage range	100 to 240 V AC (Operating voltage range 90 to 264 VAC)	
5	Input frequency	50 Hz (Operating frequency range 47 to 53 Hz)	
6	Reference clock	10 MHz or better	
7	Remote power-inhibit control and voltage monitoring	Required	
8	Operating Temperature	0 to 55 °C or better	
9	Storage Temperature	-20 to 70 °C or better	
10	Relative Humidity (Storage)	5 to 95% Non Condensing or better	
11	Acoustic Emissions	Less than 45dBA	
12	Safety Compliance	EN 61010-1, IEC 61010-1, UL 61010-01, CSA 61010-1 or better	
13	Electromagnetic Compatibility	EN 61326 EMC requirements; Minimum Immunity • EN 55011 Emissions; Group 1, Class A • CE, C-Tick, ICES, and FCC Part 15 Emissions; Class A or better	
14	Accessories	a) Slot blockers (for improved cooling performance) b) Filler Panels c) Factory installation services	

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2.6.1 Note :

1. Slot blockers & Filler Panels shall be treated as “Optional Features” (Refer Clause 2 of Section I, Subsection 1.1).

2.7 Supplier's Remarks :

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SECTION – III

BILL OF MATERIAL (BOM) FOR HIGH PERFORMANCE CONTROLLER WITH I/O ACCESSORIES

3.1 Main Item & Accessories:

S.No	Equipment	Qty	Unit Rate	Total Cost
1	High Performance Controller with RTOS (Core 2 Duo 2.16 GHz, PXI based)	1 No.		
2	DDR2 RAM (For High Performance Controller)	1 No.		
3	Analog Input Module Voltage (8 Channel differential 60 V DC Isolated, PXI based)	1 No.		
4	Shielded I/O Cable for Analog Input Module	1 No.		
5	Screw Terminal Block for Analog Input Module (UL recognized high voltage 150V CAT II, Din Rail)	1 No.		
6	Analog Output Module (16 channel 0- 20mA DC, high resolution, PXI based)	1 No.		
7	Shielded Cable for Analog Output Module	1 No.		
8	Shielded I/O Connector Block for Analog Output Module	1 No.		
9	DIO Module (Industrial 24 DI, 24 DO Channel-to-Channel Isolated, PXI based)	2 Nos.		
10	Cable for DIO Module	2 Nos.		
11	Shielded Connector Block for DIO Module	2 Nos.		
12	8-Slot 3U Chassis with Universal AC Power	1 No.		

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	Supply			
13	PXI 8-Slot Factory Installation Service and Extended Warranty	1 No.		
14	NI DSC Module, Run-Time (1x for Windows)	1 No.		
Cost Ex works				
Freight				
Taxes/ duties (Please specify rate and amount)				
Total (LANDED) Cost Including all Taxes				

3.2 Optional Items & Accessories:

S.No	Equipment	Qty	Unit Rate	Total Cost
1	250 GB (or Greater) 2.5 in SATA Hard Drive Upgrade	1 No.		
2	Analog Input Module Current: 60 V Isolated (8 ch differential, PXI based)	2 Nos.		
3	Shielded I/O Cable for Analog Input Module	2 Nos.		
4	Screw Terminal Block for Analog Input Modules (UL recognized high voltage 150V CAT II, Din Rail)	2 Nos.		
5	DIO Module (Industrial 24 DI, 24 DO Channel-to-Channel Isolated, PXI based)	1 No.		
6	Cable for DIO Module	1 No.		
7	Shielded Connector Blocks for DIO Module	1 No.		

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8	Power Cord for Chassis, 250V, 10A, India	1 No.		
9	Rear Rack Mount Kit for Chassis	1 No.		
10	NI cFP-BP-8 8 Slot backplane	1 No.		
Cost Ex works				
Freight				
Taxes/ duties (Please specify rate and amount)				
Total (LANDED) Cost Including all Taxes				

Total (LANDED) Cost for both Main & Optional Items with Accessories Including all Taxes	
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3.3 Supplier's Remarks :



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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) and Head, 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 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. 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) through Electronic Fund transfer (RTGS/NEFT/SEFT) with bank charges to the supplier's account. 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 (Refer #14 above), interest @11% 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. **Penalty for late delivery:** 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, 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% of total order value shall be levied at the discretion of BHEL.
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, incidentals due to the breach of contract on the part of the supplier through risk purchase.
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 indigenously/ 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.



RD:MPX:F-18

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

IMPORTED

Suppliers' compliance statement to basic conditions of enquiry (to be submitted along with Technical & Commercial bid)
Enquiry number: _____ **Enquiry dt:** _____

(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)
1. Validity of offer	90 days from the tender opening date (or as per enquiry)	
2. Delivery requirements	FCA – Nearest International Airport (or 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	Sight draft. All bank charges inside India will be to BHEL R&D account and outside India will be to the supplier's account. Documents through State Bank of India, Trade Finance Central processing Cell (TFCPC), Opp. Anand Theatre, Secunderabad, Andhra Pradesh, India-500003. SWIFT Code: SBININBB602, Phone: 91-40-27816795, FAX: 91-40-27720459	
5. Agency commission	Pl specify Indian agency commission charges, if any, in percentage of quotation. The same shall be paid to the agency in Indian Currency only.	
6. Erection/ Commission	As per enquiry	
7. Documentation	As per enquiry	
8. Insurance	BHEL will arrange Insurance based on intimation to our Insurance agency. Address of the agency will be mentioned in the Purchase Order.	
9. Penalty for late delivery	0.5% per week beyond the delivery date 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)



RD:MPX:F-17

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

Suppliers' compliance statement to basic conditions of enquiry (to be submitted along with Technical & Commercial bid)
Enquiry number:: **Enquiry date::**

(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	Unless specifically mentioned in the enquiry, 90 days from the tender opening date	
2) Delivery requirements	Free delivery at our stores or FOR destination (or 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 despatch or 12 months from the date of commissioning, whichever is earlier	
4) Terms of payment	Unless specifically mentioned, 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 EFT/RTGS with bank charges, if any, to supplier's account.	
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. Terms like "inclusive" or "extra" are not acceptable. Please mention "NIL" if taxes/duties are exempted/ not applicable.	
6) Penalty for late delivery	0.5% per week beyond the delivery date 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)



RD:DP:MPX:F-14

BHARAT HEAVY ELECTRICALS LTD.
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:

1.1NAME OF COMPANY

1.2DETAILS OF HEAD OFFICE:

ADDRESS :
TELEPHONE :
FAX :
.EMAIL :
.WEB SITE :

1.3DETAILS OF FACTORY/WORKS:

ADDRESS :
TELEPHONE :
FAX :
.EMAIL :
.WEB SITE :

1.4DETAILS 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
E-MAIL

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 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

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

4.0FUTURE 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: Please attach separate sheets, if space found is inadequate



BHARAT HEAVY ELECTRICALS LTD.

Corp. R&D DIVISION

VIKAS NAGAR,

HYDERABAD- 500 093 (INDIA)

Ph: 040 – 23778474, Fax: 040 – 23770698, email: mpx@bhelrnd.co.in

RD:DP:MPX:F-13

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/
Secunderabad:**

Phone Nos.:

Fax No.:

Email:

Contact person:

Mobile No.:

2.0. TYPE OF ORGANIZATION:

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.

3.0 ANNUAL TURN OVER:

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

4.0 NAME AND ADDRESS OF THE BANKER:

1. Bank Name
2. Branch name
3. Account number
4. Account Type
5. MICR Code:
6. IFSC Code(RTGS/NEFT):
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 WISH TO REGISTER FOR SUPPLIES/SERVICES:

#	Service/Supplies	Capacity
1		
2		
3		
4		
5		
6		
7		

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:

The competent authority reserves the right to accept or reject the registration. Registered vendors will be informed by mail / email, as convenient. Contact AGM (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. Use additional sheets for want of space if required.
4. Attach copies of latest documents in respect of items 5.0 (Registration no.s)
5. Photographs of registered office and the chief executive/proprietor shall be furnished.
6. Use A4 sheets for this document and the enclosures.

* REGISTERED BIDDERS, HAVING BHEL (R&D) REGISTRATION NO. OR HAVE SUBMITTED THIS FORMAT FOR REGISTRATION, NEED NOT FURNISH THIS INFORMATION AGAIN