



Enquiry No: 201102072

BHARAT HEAVY ELECTRICALS LIMITEDPage
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(A Government of India Undertaking)
 HIGH PRESSURE BOILER PLANT
 PURCHASE DEPARTMENT - FOSSIL BOILERS
 THIRUCHIRAPALLI - 620014
 TAMILNADU (INDIA)

PHONE :2577645
 GRAMS : BHARATELEC
 FAX NO: 2520719
 E-mail: srchandran@bheltry.co.in
 Web:

429-002/A

Vendor Code :	Enquiry No	Enquiry Date	Due Date for Quotation
Vendor Name :	2681200059 - 79	20.10.2012	19.11.2012
Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order			

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	QUALIFYING CRITERIA FOR THE SUPPLY OF ENERGY MANAGEMENT SYSTEM AND ENERGY METERS (ITEMS 10 & 20) AS PER ANNEXURE A SPECIFICATION FOR ENERGY METERS REQUIRED FOR MACHINE TOOLS AS PER ANNEXURE B LCD Multi function True RMS meters	NO	1.000	1.000	31.12.12
20	SPECIFICATION FOR ENERGY MONITORING SYSTEM AS ANNEXURE C Energy monitoring System	NO	1.000	1.000	31.12.12

General Note:

Note:

1. Please submit your detailed offer in two part bid system i.e
Part-I. Technical and commercial bid along with unpriced bid (Annexure-II), indicating all taxes & duties in a sealed cover
Part-II. Priced offer in another separate sealed cover.

Both the covers shall be duly super-scribed with tender reference and due date of opening. These covers shall be put in a single cover duly super-scribed with tender reference and due date of opening and addressed to us.

2. Point-to-point confirmation to BHEL's specification and commercial terms & conditions shall be provided Annexure-I. All the Annexures should be filled and submitted along with the technical bid (no row shall be left blank), else your offer is liable for rejection.

3. Offers with validity of less than 180 days and non-acceptance of LD, RP clause, PBG & Payment terms, will lead to rejection of submitted offer.


4. If the due date of tender opening happens to be a holiday, the tenders will be opened on the next working day.

The offers should reach us 30 minutes before the time of opening of tenders. The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening. Late and delayed offers are liable to be rejected.

VIGILANCE AWARENESS WEEK

29 TH OCT-3 RD NOV 2012

FOR VIGILANCE RELATED COMPLAINTS**CONTACT GM / VIGILANCE****PHONE:0431-2577552,2577752**Yours faithfully,
For **BHARAT HEAVY ELECTRICALS LIMITED**


 S. RAMESH CHANDRAN
 MANAGER - PURCHASE
 PURCHASE DEPARTMENT
 FOSSIL BOILERS
 THIRUCHIRAPALLI
 TAMILNADU - 620014
 BHEL TRICHY - 620044



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FAX NO: 2520719
E-mail: srchandran@bheltry.co.in
Web:

2681200059 / 20.10.2012

5. All clarifications may be sought at least ten days prior to tender due date, from the undersigned with due written request.
6. BHEL reserves the right to go for a reverse auction (RA) instead of opening the submitted sealed bid, which will be decided after technical evaluation. Information and general terms and conditions covering RA are given in commercial terms and conditions (Annexure-I/Point no.14)
7. All items (10 & 20) in this tender are interlinked with each other. Hence order shall be placed on the single vendor on cumulative L1 basis
8. Corrigendum if any, with respect to this tender will be hosted only in the website <http://www.bhel.com> or <http://tenders.gov.in>. You are requested to visit the website regularly for updates.

List of Attachments:

1. Qualifying Criteria Annexure-A
2. Specification for Energy Meter-Annexure-B
3. Specification for Energy Monitoring System-Annexure-C
4. Commercial Terms and Conditions - Annexure-I
5. Price Format-Annexure-II


Enclosures:

"LD clause has to be confirmed without fail."
"Payment to vendors will be made only thro E-Payment mode"

The offers should reach us 30 minutes before the time of opening of tenders.
The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening. Late and delayed offers are liable to be rejected.

VIGILANCE AWARENESS WEEK
29 TH OCT-3 RD NOV 2012
FOR VIGILANCE RELATED COMPLAINTS
CONTACT GM / VIGILANCE
PHONE-0431-2577645, 2577742

Yours faithfully,
For **BHARAT HEAVY ELECTRICALS LIMITED**


MANAGER (DRY) SE
S. RAMAKRISHNA
P.O. CHIRAPPAL, THIRUCHIRAPALLI
TAMILNADU - 620014
BHEL TRIGHT - 620014

ANNEXURE A

QUALIFYING CRITERIA FOR THE SUPPLY OF ENERGY MANAGEMENT SYSTEM

SECTION – I

The BIDDER has to compulsorily meet the following requirements to get qualified for submitting an offer for ENERGY MANAGEMENT SYSTEM

1	The BIDDER / VENDOR shall have a minimum of THREE Years of Continuous Experience in the Manufacture & Supply of Energy management System.	
2	The BIDDER / VENDOR shall have a facility for Calibration and testing of Energy meters & Current Transformers.	
3	The BIDDER / VENDOR shall have supplied at least one Energy management system with 35 working Nodes or more to Customers in India in the past ONE year and the system is in satisfactory working condition as on the date of opening the tender.	
4	Reference List of Customers with full contact details of CONTACT PERSON, who are the End Users of Energy management System.	

SECTION – II

The BIDDER is expected to give complete details against each clause in the table given below and wherever necessary an additional sheet may be attached (giving clear reference number) to cover the required details.

S. No.	PARTICULARS	VENDOR'S RESPONSE
5	Number of Years of Experience of the BIDDER/ VENDOR in the field of design, manufacture and supply of Energy management system for industrial lighting applications	
6	Number of Energy monitoring Systems supplied in the last ONE year	
7	Details of manufacture, assembly, testing & Calibration facility of the vendor in India	
8	Details of Quality System followed (Furnish the salient aspects of the Quality Assurance System followed)	
9	Details of source of sub vendors for sub assemblies	
10	Details on SERVICE-AFTER-SALES Set-Up in Trichy including the Addresses of Agents / Service Centres in India, to be furnished compulsorily.	
11	Any Additional Data to supplement the manufacturing capability of the BIDDER	

SECTION – III

The BIDDER / VENDOR has to comply with the following, for accepting the Technical Offer for scrutiny by the Purchaser:

12	The BIDDER shall submit the offer in TWO PARTS - Technical [with PART A & PART B] & Commercial and Price Bid.	
13	Both the Items in Part B are interlinked with each other. Hence Orders shall be placed on the Single vendor on cumulative L1 basics.	
14	Vendor Shall Visit the all the Machine Shop (Bldg.1, 50, 5, 6, Unit II & Compressor House) for assessment & discussion with the respective shop maintenance Engineers before quote the offer. Offers received without Visit will be rejected.	
15	Vendor Shall Demonstrate both Multifunctional meter with EMS in BHEL before dispatch of the all the materials. This will be observed for a week for Satisfactory working.	
16	The Offer shall contain a comparative statement of Technical Specifications given by BHEL and the Offer Details submitted by the Bidder, against each clause. A just 'CONFIRMED' or 'COMPLIES' or 'YES' or 'NO-DEVIATION' or similar words in the technical comparative statement may lead to disqualification of the Technical Offer.	
17	The BIDDER shall assure a continuous support for SPARES and SERVICE for at least TEN Years, from the date of commissioning of the equipment at BHEL Works.	
18	The Technical Offer shall be supported by Product Catalogue and Data Sheets in ORIGINAL and complete technical details / literature on the QUOTED MODELS of Energy management system.	
19	The Commercial Offer (given with the Technical Offer) shall contain the Scope of Supply and the Un-Priced Part of the Price-Bid, for confirmation	
20	The reference List of Customers (for whom the OFFERED Model of Energy management system. is supplied) given, shall be compulsorily accompanied with the details (Phone Number /E-Mail ID) of the CONTACT PERSON for cross reference by BHEL.	
21	Earlier performance & field experience (service support) with BHEL (if any) will be a reckoning factor for the technical qualification of the OFFER.	
22	Along with Technical offer, the Vendor should submit performance certificate from minimum one customer for the satisfactory performance of the same, supplied to them in the customers letter head as per attached format.	
23	BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false / incorrect, the offer shall be rejected.	

SECTION – IV

The performance certificate should be produced **on Customer’s Letter Head.**

PERFORMANCE CERTIFICATE

1	Supplier of the EMS System	
2	Model of the EMS System	
3	Month & Year of Installation	
4	Application area / Industry	
5	Quantity	
6	Performance of the system (Strike off whichever is not applicable)	Satisfactory / Good / Average / Not Satisfactory
7	After sales service (Strike off whichever is not applicable)	Satisfactory / Good / Average / Not Satisfactory
8	Any Other remarks	
	Date:	Signature & Seal of the Authority Issuing the Performance Certificate

ANNEXURE - B

ITEM NO: 10 - Specification for Energy meters required for Machine tools:-

S.No	PARTICULARS AND BHEL SPECIFICATION	BIDDER'S OFFER
		(with complete Technical Details)
1.0.0	<u>Specification for LCD Multi function True RMS meters:-</u>	
1.1.0	Measuring Parameters & Accuracy:-	
1.1.1	Voltage (Ph to Ph, Ph to N) (Individual / Average) :: Accuracy : +/-0.5% of Full Scale.	
1.1.2.	Current (I1,I2, I3)(Individual / Average) :: Accuracy : +/-0.5% of Full Scale.	
1.1.3	Frequency :: Accuracy : +/-0.5% of Full Scale.	
1.1.4	Power Factor (Individual / Average) :: Accuracy : +/-0.1% of Full Scale.	
1.1.6	Active, Reactive & Apparent Power (Individual / Average) :: Accuracy : IEC 62053 Class 1	
1.1.7	% THD Display for Current & Voltage Harmonics	
1.1.7	Active, Reactive & Apparent Energy (Individual / Average) :: Accuracy : IEC 62053 Class 1	
1.2.0	Resolution	
1.2.1	For Energy – 6 Digits Auto Resolution	
1.2.2	Other Parameters : 4 Digits Auto Resolution.	
1.3.0	Input Type:-	
1.3.1	3 Phase, 3 and 4 Wire System	
1.4.0	Input Voltage:-	
1.4.1	40 to 519 V AC Ph to Ph at 50 Hz	
1.4.2	25 to 300V AC Ph to Neutral at 50 Hz	
1.5.0	Input Current:-	
1.5.1	1Amps or 5Amps Programmable Based on CT Selection.	
1.5.2	CT Primary & Secondary shall be Field Programmable	
1.5.3	CT Secondary Shall be 1A/5A Setting & Primary shall be upto 10,000 Amps.	

S.No	PARTICULARS AND BHEL SPECIFICATION	BIDDER'S OFFER
		(with complete Technical Details)
1.6.0	Control Supply Voltage	
1.6.1	90 to 270V AC / DC	
1.7.0	Display:-	
1.7.1	Size : 96 x 96 mm	
1.7.2	3 or more Rows x 4 Digits	
1.7.3	6 or more Digit Display for Energy	
1.7.4	Direct Reading without multiplication factor.	
1.7.5	LCD Display with Backlit	
1.7.6	Energy Saver option for backlit auto Switching off .	
1.8.0	Operating Temperature:-	
1.8.1	0 to 50° C.	
1.8.2	Communication Facility:-	
1.9.0	Meters shall have inbuilt provision for RS 485 Communication with Modbus protocol.	
1.9.1	Meters shall also support Minimum 2 Digital Inputs (Preferable DC 24V) & 2 Digital Outputs (Preferable Potential free NO contacts) and Same shall be controlled from Remote monitoring System.	
1.10.0	CT / PT Burden	
1.10.1	CT / PT Burden shall be less then 0.2VA	
1.11.0	Calibration Certificate:-	
1.11.1	Calibration certificate shall be Submitted along with traceability on international standard.	
1.12.0	Sampling Rate:-	
1.12.1	Minimum 32 Samples per Cycle	
1.13.0	Quantity	
1.13.1	200 Nos	
2.0.0	<u>Specification for LCD Multi function meters with Individual Harmonic Measurement:-</u>	
2.1 to 2.11.1	All Specifications are as same as 1.1 to 1.11.1	
2.12.0	Sampling Rate:-	
2.12.1	Minimum 64 Samples per Cycle	
2.13	Harmonics	
2.13.1	a. % THD Display for Current & Voltage Harmonics on all three Phases. b. % Individual harmonic display up to 31st Harmonics for both Current & Voltage on all three Phases.	
2.14	Quantity	
2.14.1	50 Nos	

S.No	PARTICULARS AND BHEL SPECIFICATION	BIDDER'S OFFER
		(with complete Technical Details)
3.0.0	<u>SPECIFICATION FOR CURRENT TRANSFORMERS</u>	
3.1.0	GENERAL	
3.1.1	This specification covers manufacture, test, & supply of LT Current transformers of class 0.5 accuracy.	
3.1.2	The CTs shall be suitable for metering purpose.	
3.2.0	TYPE:	
3.2.1	The CTs shall be of ring type.	
3.2.2	The secondary leads shall be terminated with Tinned Cooper rose contact terminals with arrangements for sealing purposes.	
3.2.3	Polarity (both for primary and second leads) shall be marked.	
3.2.4	The CTs shall be varnished; fibreglass tape insulated or cast resin, air-cooled type. Only super enamelled electrolytic grade copper wires shall be used.	
3.2.5	The CTs shall conform to IS 2705: Part-I & II/IEC: 185 with latest amendments.	
3.3.0	3.0 TECHNICAL DETAILS:	
3.3.1	Technical details shall be as given below:	
3.3.2	Class of Accuracy : 0.5	
3.3.3	Rated Burden : 5.00 VA	
3.3.4	Power Frequency Withstand Voltage : 3KV	
3.3.5	Highest System Voltage : 433 V	
3.3.6	Nominal System Voltage : 415 V	
3.3.7	Frequency : 50 Hz	
3.3.8	Supply System : 3 Ph. Solidly grounded Neutral System	
3.4.0	The base shall be of hot dip galvanized steel.	
3.5.0	The limits of current error and phase angle displacement as per IS:2705	
3.6.0	Rated extended primary current shall be 120% of rated primary Current in accordance with IS: 2705 Pt-II.	
3.7.0	Rated ISF (Instrument Security Factor) shall be declared by the manufacturer & marked on the CT.	
3.8.0	CT's shall be made with good engineering practices. Core winding shall evenly spread stress & avoid stress concentration at any one point. Cast resin CT's shall be processed by hot curing method under controlled vacuum conditions.	

S.No	PARTICULARS AND BHEL SPECIFICATION	BIDDER'S OFFER
		(with complete Technical Details)
3.9.0	TESTS:	
3.9.1	Copies of all type tests as per IS.2705 Part-I and II including short time current & temperature rise tests in NABL accredited laboratory shall be submitted and got approved before commencement of supply.	
3.9.2	The supplier shall conduct all the routine tests such as Ratio test, phase angle error test for 0.5 accuracy class as per IS 2705 Part I & II.	
3.9.3	In accordance with IS:2705, Power frequency test on primary winding shall be carried out after erection on site on sample basis.	
3.10.1	The CTs shall have marking and nameplate as per IS 2705 in addition to class of insulation & ISF. The markings shall be indelible. The nameplate shall be securely fixed to the body of the CT.	
3.11.0	GUARANTEED TECHNICAL PARTICULARS FOR	
	1.Maker's Name & address	
	2.Type and capacity	
	3.Rated voltage	
	a).Highest system Voltage	
	b).Rated Primary Current	
	c) .Rated Secondary Current	
	e).Rated Output	
	f).Rated continuous thermal current Temperature rise over ambient	
	.Power Frequency Withstand Voltage	
	4.Class of Accuracy	
	5.Material	
	a).Core	
	b).Conductor	
	c).Insulation	
	d).Base MS Zinc plated	
	6.Dimension in mm	
	a).Inner Dia. of CT	
	b).Outer Dia. of CT	
	c).Height of center of CT from base	
	7.Secondary termination	
	8.ISF	
	9.Extended primary current	

S.No	PARTICULARS AND BHEL SPECIFICATION	BIDDER'S OFFER
		(with complete Technical Details)
3.12.0	Quantity	
3.12.1	Transformation ratio shall be specified from the following standard ratings as per requirement: (Each Set contains 3 CTs) : Total 250 Sets	
	Ratio :: Qty in sets :: ID in mm shall not less than	
	50/5 :: 8 :: 30	
	100/5 :: 71 :: 30	
	150/5 :: 38 :: 50	
	200/5 :: 49 :: 50	
	300/5 :: 17 :: 65	
	400/5 :: 55 :: 65	
	800/5 :: 12 :: 140	
3.12.2	Vendor Shall Study the Size of the required CT in all identified Machines for selection of appropriate Size of CTs.	
4.1.0	<u>Installation & Commissioning of Multi-functional meters & CT with Accessories.</u>	
4.1.1	Vendor Shall Supply appropriate Fixture / Clamping Arrangement for all above mentioned CTs.	
4.1.2	Vendor shall supply all the cables like interconnecting cable of CT to meter, all 3phase supply voltage, control voltage supply, Etc.	
4.1.3	Vendor shall Fix the CTs in the Existing machine panel at the appropriate location as directed by Shop maintenance Engineer.	
4.1.4	Vendor shall make the Cut out for Fixing the multi-functional meets in the Existing machine Panel at the appropriate location (preferably on door of the panel) as directed by Shop maintenance Engineer - 150 Numbers	
4.1.5	Meter Shall be fixed in Appropriate Sized Metal Box based on Site condition & Area Maintenance Engineer Direction - 100 Numbers	
4.1.6	Vendor shall run all the Cables with the appropriate cable duct & Flexible hoses.	

ANNEXURE - C

ITEM NO: 20 - Specification for Energy monitoring system:-

S.No	PARTICULARS AND BHEL SPECIFICATION	BIDDER'S OFFER
		(with complete Technical Details)
1.0.0	<u>Specification for Energy monitoring System</u>	
1.1.0	Energy monitoring System with licensed software. Licence shall not be limited by time duration.	
1.1.1	EMS Software Shall be Suitable for Windows 7.	
1.1.2	Software Shall be of Web based System. So that It can be viewed in all the PC Connected in the network. Minimum 10 Terminals at a time.	
1.1.3	One latest version PC will be provided by BHEL for installing the EMS System and related Software.	PC Configuration to be mentioned by Vendor.
1.1.4	Voltage between each phases, Current in all phases, frequency, Power factor, Active power, Apparent power, Reactive power, Active Energy, Apparent energy, Reactive Energy, THD Voltage Value, THD Current Value, THD%, Individual Harmonic Value & % Shall be monitored on the EMS System.	
1.1.5	EMS System shall have provision for Auto/Manual updation of energy data if meter Reset.	
1.1.6	All the data shall be recorded for the interval of 1 minute. Provision shall be made for Recording data in 3 minutes / 5 Minutes / 15 Minutes / 30 Minutes	
1.1.7	Provision for exporing data in Excel format.	

S.No	PARTICULARS AND BHEL SPECIFICATION	BIDDER'S OFFER
		(with complete Technical Details)
1.2.0	<u>Energy Monitoring System shall have following Screens:-</u>	
1.2.1	User Log in Screen	
1.2.2	Main Screen for On-Line Data	
1.2.3	Main Screen for On-Line Report	
	a. Daily Report (Hourly energy report)	
	b. Monthly report (Daily & Weekly energy Report)	
	c. Yearly Energy Report (Monthly energy Report)	
	d. Shift Report	
	e. Machine utilisation report based on DI/DO	
	f. Average power factor Report.	
	g. Alarm Report.	
	h. TOD Report	
	i. Comparative report between Different months & Different Machines.	
	j. Online viewing of all parameters of individual Machines.	
	k. Online viewing of Energy parameters & Trends of Machine groups.	
	l. Control Screen for digital input & outputs in the meters. Load hours shall be Recorded based on the Digital inputs. Buttons shall be provided for Activate Digital outputs (with password control).	
1.2.4	Main Screen for On-Line Trend of selected parameters.	
	a. Single Trend	
	b. Comparative Trend.	
1.2.5	Administrator Login Screen	
1.2.6	Main Screen for On-Line Configuration.	
1.3.0	Our Existing LAN Network shall be utilised. 25 IPs at different locations nearby clusters of meters will be provided.	
1.7.0	Appropriate Connectors for All Cables termination shall be of Supplier Scope.	

S.No	PARTICULARS AND BHEL SPECIFICATION	BIDDER'S OFFER
		(with complete Technical Details)
2.0.0	<u>DATA CONCENTRATOR / INTEGRATOR:-</u>	
2.1	Circuit design: Microcontroller based	
2.2	No. of Keys: 4 Keys namely Index, Shift, Increment & Enter	
2.3	Communication network : Multi drop configuration	
2.4	Baud rate : 9600 (10/100Mbps)	
2.5	Input data: Data from energy Meter through RS485 serial port	
2.6	Input Termination : Through Screw type terminals for RS485 input connection	
2.7	Maximum distance from meter to Data Concentrator : upto 1.2 km.	
2.8	Parameters settings : Through front key panel & LCD Display	
2.09	Communication output : Ethernet connectivity	
2.10.	Output termination : Through RJ45 Jack	
2.11	Baud rate : 10/100 Mbps	
2.12	Communication status : LED's for TXD & RXD	
2.13	Auxiliary power supply: 230V AC \pm 10%, 50 Hz	
2.14	Box dimension : Vendor to Specify	
2.15	Mounting: Shall be mounted on the Separate Box.	
2.16	Quantity : 25 Nos	
3.0.0	<u>RS485 TO RS485 REPEATER:-</u>	
3.1	input : RS 485 communication input	
3.2	Output: RS 485 communication output	
3.3	Maximum connectivity: 30 Nodes	
3.4	Baud rate: 9600 (10/100Mbps)	
3.5	Communicated to max. distance: 1.2 Kilometres.	
3.6	Aux. Power supply : 230v AC	
3.7	Quantity: 10 Nos	

S.No	PARTICULARS AND BHEL SPECIFICATION	BIDDER'S OFFER
		(with complete Technical Details)
4.0.0	<u>RS485 COMMUNICATION UN ARMoured CABLE</u>	
4.1	Type: Polyethylene Insulated PVC sheathed Copper conductor (overall) Shielded unarmoured communication cable as per RS 485	
4.2	Size: 1 pair & 24 SWG	
4.3	Conductor material: High conductivity electrolytic grade annealed tinned copper conductor as per IS-8130,1984	
4.4	No. of strands / dia : 7 strand	
4.5	Insulation material : Polyethylene	
4.6	Insulation thickness: 0.5 mm	
4.7	Color code: White & Black	
4.8	Twisting: 10 – 12 twist/ mtr.	
4.9	Shielding material (Overall): Aluminium	
4.10.	Shielding material thickness : 50 micron.	
4.11	Quantity: 10000 Meters	
5.0.0	<u>ETHERNET CABLE</u>	
5.1	Cables interconnecting between BHEL Hub & Data Concentrator or Integrator are in Suppliers Scope.	
5.2	Quantity: 1000 Meters	
6	<u>Tools</u>	
6.1	Vendor Shall Supply appropriate 5 Sets of tools for maintenance of EMS like Ethernet cable Crimping tool, Connectors, tools for checking the Correctness of cable & Crimping etc.	
7.1.0	<u>Installation & Commissioning of EMS</u>	
7.1.1	Vendor Shall lay all the required cables for EMS through proper PVC Conduits & Hoses. All the tools, fixtures, PVC ducts, Hoses, fasteners, accessories required are of vendors Scope. BHEL will provide electrical power supply at from nearby terminal.	
7.1.2	Vendor shall interconnect all the meters with data concentrator & Interconnect Data concentrator with BHEL Networking HUB.	
7.1.3	Vendor Shall install all the software in the BHEL PC to ensure all the functions of EMS.	
7.1.4	Vendor Shall provide demo & training on the EMS for 2 days after commissioning in BHEL Premises.	
7.1.5	Vendor shall visit Once in three months (for one year after Commissioning) to update the system & make necessary modification in the EMS System.	

BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI
CAPITAL PURCHASE

Annexure-I

ACCEPTANCE OF COMMERCIAL TERMS AND CONDITIONS BY THE VENDORS.

(This should be essentially filled in and sent along with the techno-commercial offer without fail. If this check list is not filled and submitted along with techno-commercial offer (Part I) or if the vendor does not confirm acceptance to the terms and conditions proposed herein, BHEL reserves the right to reject such offers)

CHECK-LIST FOR VENDORS

SI No	DESCRIPTION
1.	<p>The Bidders shall submit their offer in TWO INNER ENVELOPES as indicated below which shall be sealed in one outer envelope.</p> <ul style="list-style-type: none">❖ Envelope I: This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked "Part I - Technical and commercial bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder.❖ Envelope II: This sealed envelope should contain price details. This envelope should be clearly marked "Part II - Price bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder. This part should contain the schedule of price particulars and must be co-related to the technical details provided in Part I. <p>All the two envelopes (Part I&II) shall be put in one cover, duly sealed, super scribing as "Part I and Part II of Enquiry No., due date of opening" and the address and reference of the Bidder.</p> <p>The above offer should reach this office on or before the due date by 14.00 Hrs (IST). Late offers will not be considered.</p> <p>Tender should not be addressed to any Individual's name but only by designation to:</p> <p style="text-align: center;">DGM / CAPITAL PURCHASE / MFG BHARAT HEAVY ELECTRICALS LIMITED HIGH PRESSURE BOILER PLANT TIRUCHIRAPALLI - 620 014 TAMIL NADU, INDIA</p> <p>Tenders should be free from CORRECTIONS AND ERASURES. Corrections if any, must be attested. All amounts shall be indicated both in words as well as in figures. In case of any difference between amount quoted in words and figures, amount quoted in words shall prevail.</p> <p>Offers should be in ENGLISH and accompanied by detailed technical literature, catalogue and detailed dimensional drawings in ENGLISH or otherwise, the offers will not be considered.</p>
2.	<p><u>OPENING OF TENDERS</u></p> <p>The Part I- Technical & commercial bid would be opened on the Tender opening date.</p> <p>Part-II, Price bid of technically suitable Bidders alone would be opened after complete evaluation of Part-I. BHEL reserves the right to go for a reverse auction (RA) instead of opening the submitted sealed bid, which will be decided after technical evaluation. Information and general terms and conditions covering RA are given in this Annexure- I (Point no.14).</p> <p>Date and time of Price Bid (Part-II) opening / RA conducting date shall be intimated to the technically and commercially acceptable bidders only. Clarifications if any required by BHEL for Technical evaluation would be sought from bidders before opening of Part II - Price Bid/ RA</p>
3.	<p><u>TAXES AND DUTIES :</u></p> <p>All Taxes and Duties payable as extra to the quoted price should be specifically stated in offers along with CST & TIN No / Tariff No. etc., failing which the purchaser will not be liable for payment of such Taxes and Duties. Our TIN No. 33243560005, TNGST No. 3560005, CST. No. 239383 Dt. 11-06-1991 & BHEL ECC No. AAACB4146PXM012, Service Tax Reg No (STC)- AAACB4146PST006. Assessment circle Tiruverambur.</p> <p>Cenvat credit & VAT credit (for Indian Bidders only): If any Excise Duty is payable, the chapter head / sub-head reference and the rate of the duty should be quoted. If the tenderer is availing CENVAT credit for his input materials, the effect of proforma credit should be passed on to the purchaser</p> <p>Income Tax applicable Any service charges payable towards supervision of E&C, training, performance prove-out etc., will be released after deduction of Income Tax as per Indian Income Tax Act / as per the Govt. of India rules and TDS certificate will be issued by BHEL for such deductions. Applicable service tax on E&C charges will be payable extra. The liability of depositing the same to the Govt. will be of the supplier</p>

No row shall be left blank. Please indicate NA, in case the item is “not applicable”		Vendor's confirmation
4.	Validity: Validity of the offer should be 180 days from the date of tender opening.	
5.	<p>Release of Purchase Order, submission of PBG and terms of Payment:</p> <ul style="list-style-type: none"> ➤ Purchase Orders (separate for supply and service portion if applicable) will be released on the successful vendor. ➤ Payment terms for Indian suppliers: 100% payment, within 45 to 90 days, after receipt , acceptance & commissioning of equipment at BHEL, Tiruchi against submission of 10% PBG for total order value. ➤ Erection & Commissioning Portion (if applicable only): 100% of the Erection / commissioning charges (in case contract involves erection/commissioning) shall be paid only on completion of such erection / commissioning at BHEL. 	
6.	<p>Performance Bank Guarantee (PBG): The Bidder, in the event of an order, should furnish a Bank Guarantee from an Indian Bank approved by BHEL, at no extra cost in a format prescribed by BHEL, along with the order, for an amount equivalent to 10% (Ten percent) of the value of the contract. The PBG shall be valid for a period of 18 months from the date of dispatch or 12 months from the date of receipt / acceptance / commissioning of the equipment at BHEL, Tiruchi whichever is more, with a claim period of two months.</p> <p>The Performance Bank Guarantee shall be obtained from any one of the following banks which is a member bank in our consortium of banks.</p> <p>LIST OF CONSORTIUM BANKS 1.DEUTSCHE BANK 2.HDFC BANK 3.ANZ GRINDLAYS BANK 4.CITI BANK 5.STANDARD CHARTERED BANK 6.BANK OF AMERICA 7.ABN AMRO BANK 8.IDBI LTD 9.ICICI BANK LTD 10.THE HONGKONG AND SHANGHAI BANKING .CORPORATION LTD.</p> <p>LIST OF NATIONALISED BANKS 1.ALLAHABAD BANK 2.ANDHRA BANK 3.BANK OF INDIA 4.BANK OF BARODA 5.BANK OF MAHARASTRA 6.BHARATH OVERSEAS BANK 7.CANARA BANK 8.CENTRAL BANK OF INDIA 9.CORPORATION BANK 10.DENA BANK 11.INDIAN BANK 12.INDIAN OVERSEAS BANK 13.OREINTAL BANK OF COMMERCE 14.PUNJAB NATIONAL BANK 15.PUNJAB & SIND BANK 16.STATE BANK OF INDIA 17.STATE BANK OF TRAVANCORE 18.STATE BANK OF MYSORE 19.STATE BANK OF BIKANER & JAIPUR 20.STATE BANK OF HYDERABAD 21.STATE BANK OF PATIALA 22.STATE BANK OF MAHARASTRA 23.STATE BANK OF SOURASTRA(SBI-13.09.08) 24.SYNDICATE BANK 25.UCO BANK 26.UNION BANK OF INDIA 27.UNITED BANK OF INDIA 28.VIJAYA BANK</p> <p><u>If PBG is issued by a Foreign counter part of the BHEL consortium Indian Bank, in case of claim against the PBG , it will be lodged in any one of the Indian counters of the Foreign Bank which issued the PBG.</u></p>	
7.	<p>Liquidated damages (LD):</p> <p>It is clearly understood among the parties to the contract that “Time is the essence of the contract”. Therefore, the delivery of the goods specified in the purchase order should be made within the time prescribed. Where the seller supplies or dispatches the goods, beyond the delivery period specified, the purchaser will have no obligation to accept the goods. If accepted, Liquidated Damages at the rate of ½ % of the value of goods delayed for each week of delay subject to a maximum of 15% of the order value will be levied.</p> <p>Liquidated Damages @ ½ % per week subject to a maximum of 15% of the Erection Charges shall be applicable for delay in the Period for completion of the Retrofitting / Reconditioning work (if applicable only).</p> <p>For the purpose of Imposing LD, the FOB delivery (B/L date) shall be considered. <u>BHEL reserves the right to reject offers from vendors not accepting the above LD clause, with maximum LD as 15%.</u></p>	
8.	<p>Risk Purchase:</p> <p>Alternatively the purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated as aforesaid or if the same were not available from the best and the nearest available substitute. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases.</p>	
9.	<p>Delivery terms and evaluation process:</p> <p>Indian Bidders should submit their offer on FOR BHEL, Tiruchy basis. Packing & Forwarding and Freight & Insurance charges from works to BHEL, Tiruchy to be indicated separately if extra from basic rate. Applicable % of ED & Sales Tax , Commissioning Charges should be clearly indicated.</p> <p>Evaluation of offers shall be on the basis of delivered cost (Net cash outflow to BHEL)</p>	

	<p style="color: red;">No row shall be left blank. Please indicate NA, in case the item is “not applicable”</p>	<p style="background-color: yellow;">Vendor’s confirmation</p>
<p>10.</p>	<p>Guarantee: Vendors shall provide a guarantee for a period of 12 months from the date of commissioning of the equipment or 18 months from date of supply, whichever is earlier. The date of B/L or AWB shall be taken as the date of supply.</p> <p>Also, a PBG has to be given which shall cover the guarantee period (with additional 2 months as claim period).</p> <p><u>Offers from vendors not accepting the requested guarantee period will be rejected.</u></p>	
<p>11.</p>	<p>Short shipment / Warranty replacement: In case of any short shipment in the main equipment / spares, Customs Duty levied on such supplies, shall be borne by the supplier. Any warranty replacement during the warrantee period shall be on FOR, BHEL, Tiruchirappalli, basis.</p>	
<p>12.</p>	<p>Inspection & Testing: All goods shall be subject to inspection by BHEL or its authorized representatives at supplier’s works or at BHEL stores or at any other place in India indicated by BHEL as the case may be. The supplier will not charge for the facilities provided for inspection of goods. In case of machine tools, the machine would be inspected and proved at supplier’s works prior to dispatch however, final inspection and acceptance of the machine will be carried after installation of the machine at BHEL, Tiruchirappalli.</p>	
<p>13.</p>	<p>Test certificates / Operating and Maintenance manuals: The Bidders shall clearly mention in their offer, that Test Certificates and Operating Maintenance Manuals, etc., as called for in the Technical Specification, in the required number of copies will be provided at no extra cost.</p>	
<p>14.</p>	<p>Reverse Auction (RA): BHEL reserves the right to conduct on-line internet Reverse Auction for finalizing the Tender. This decision will be communicated to the technically qualified vendors after technical evaluation. Details / General terms / guidelines for conduct of RA are shown below Vendors are requested to confirm their acceptance for BHEL proceeding with RA route for finalization of the enquiry.</p> <ol style="list-style-type: none"> 1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate. 2. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet. 3. BHEL will inform the vendor in writing in case of reverse auction, the details of Service Provider to enable them to contact & get trained. 4. Business rules like event date, time, Start price, bid decrement, extensions etc. also will be communicated through service provider for compliance. 5. Vendors have to fax the Compliance form in the prescribed format (provided by Service provider) before start of Reverse auction. Without this, the vendor will not be eligible to Participate in the event. 6. 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 vendor to enable them to fill-in the price and keep it ready for keying in during the Auction. 7. Reverse auction will be conducted on scheduled date & time. 8. At the end of Reverse Auction event, the lowest bidder value will be known on the network. 9. The lowest bidder has to Fax the duly signed Filled-in prescribed format as provided on case-to-case basis to BHEL through Service provider within 24 hours of Auction without fail. 10. Any variation between the on-line bid value and the signed document will be considered as sabotaging the tender process and will invite disqualification of vendor to conduct business with BHEL as per prevailing procedure. 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. BHEL reserves the right to negotiate if need be, with the “L1” vendor of the Reverse Auction 13. <u>BHEL reserves the right not to consider offers from vendors not complying with the RA process for finalization of the enquiry.</u> 	

15.	<ul style="list-style-type: none"> ➤ Point to point confirmation for the Technical Specification enclosed has to be provided. If there are any deviations, the same should be clearly specified. Offers received without confirmation to our specification will be liable for rejection. If needed additional sheets shall be used. ➤ Indian bidders should submit the prices only in Indian Rupees. ➤ List of customers to whom same or similar equipment have been supplied along with performance certificates to be enclosed ➤ Relevant catalogues to be attached ➤ List of spares parts (if it is specified in the enquiry sheet) for two years operation and maintenance should be attached with part numbers. ➤ Prices shall be quoted item wise only as per the model format enclosed. An unpriced copy shall be submitted along with technical bid where in the applicable Taxes and Duties Shall be clearly specified ➤ Equipment offered shall be "New". Re-built / Re-conditioned / Used equipments will not be accepted. Incomplete offers will not be considered for further processing Fixed price: ➤ Prices quoted by the bidder shall be fixed and not subject to any escalation whatsoever during the period of bid validity and execution of the Purchase Order. A bid submitted with an adjustable price will be treated as non - responsive and rejected. Prices shall be written in words and figures. In the event of difference, the price in words shall be valid and binding. Unit prices shall be considered correct in the event of any discrepancy with regard to total price. ➤ The Supplier shall arrange for securely protecting and packing the stores to avoid loss or damages during transit. ➤ Evaluation of offers shall be on the basis of delivered cost (Net cash outflow to BHEL). ➤ BHEL reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract at any of BHEL projects / units. ➤ BHEL shall be at liberty to reject or accept any tender, part or in full, at their own discretion and any such action is not liable for any question or claim against BHEL. ➤ All Equipments / Services including concern Personal for carrying out the erection and commissioning of the Equipment shall be arranged by the vendor. If any Services is availed from BHEL, it is only on chargeable basis unless otherwise specified. ➤ The vendor shall provide necessary drawings, Test Certificates and Operating Maintenance Manuals etc., as called for in the Technical Specification, in the required number of copies at no extra cost ➤ Any replacement during warranty period shall be supplied free of charge on FOR BHEL, Trichy basis. 	
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16. Company Details & Contact	
Name & Full Address of the company:	
Company Email ID:	
Phone No.:	
Fax No	
PAN No	
CST /TIN No	
Service Tax No.	

	Name of the contact person:	
	Mobile No.:	
	e-mail ID	
17.	TO BE CONFIRMED BY VENDOR	
	Country of origin:	
	Station of dispatch/Port of Shipment	
	Delivery Terms (For destination/Ex-works as per clause 9	
	Packing & Forwarding Charges, if any (in % or Lumpsum) ie. extra from basic rate	
	% of Excise Duty with cess	
	% of TAX (CST/VAT) (TNGST with FORM-17 or CST with C-FORM)	
	Freight & Transit Insurance charges (if any, in Lumpsum (or percentage) from Dispatching station to BHEL Tiruchirappalli, (Note:If the delivery terms is Ex Works the materials has to be sent through BHEL approved carrier only, in this case the Freight & Insurance will be borne by BHEL)	
18.	(If applicable only)	
	Erection & commissioning charge is inclusive (or) exclusive of basic rate	
	Service tax applicable extra or not	
19.	Delivery from the date of Letter of Intent / Purchase Order. (This should be inclusive of Order acceptance, drawing approval and time period required for dispatch (B/L or AWB date) etc.,	
	Period for completion of the Retrofitting / Reconditioning (Erection & Commissioning) work at BHEL shall be clearly specified in the offer	
20.	Weight & Cubage of package:	
	Approximate Net weight of the total consignment:	
	Approximate Gross weight of the total consignment:	
	Approximate volume of the total consignment:	
For any queries / clarifications the bidders may contact us through our FAX NO. +91 431 2520719 or through e-mail <srchandran@bheltry.co.in>		

NOTE:-

- a) Your specific acceptance to our Payment terms, LD, Risk Purchase Clause & Submission of PBG for 10% of the order value are essential for consideration of your offer. Otherwise your offer is liable for rejection.
- b) **No row shall be left blank. Please indicate NA, in case the item is “not applicable”**

Declaration:-

I/We have gone through and understood the ‘General guidelines & instructions to bidders for submitting offer’ enclosed as a part of the Tender and confirm that our offer has been made in line with the same.

(AFFIX OFFICIAL SEAL HERE)

Signature with date:

Name:

Designation:

Department:

(PLEASE AFFIX YOUR SIGNATURE WITH SEAL ON EACH PAGE)

MODEL PRICE BID FORMAT FOR INDIAN BIDDERS

Enquiry No. & Date:

Bidder's Offer No. & Date:

Sl No	Description of item	Unit (SET /No)	QTY	Rate /Qty in Rs. (excluding of all taxes)	VAT/CST in % (TNGST with FORM-17 or CST with C-FORM)	ED in %	Service Tax in %	Total Value in Rs. (inclusive of all taxes)
1	Supply portion (The price indicated shall be exclusive of all accessories, spares etc. as given in the scope of supply.)							
2	Other accessories / spares etc as given in scope of supply (Individual item-wise break-up price shall be attached as an annexure to this price bid format.)							
3	Installation & Commissioning (if available in scope only)							
4	Packing & Forwarding charges (if any) in percentage (or) Lumpsum							
5	FOR Dispatching station value in Rs.							
6	Percentage of Freight & transit insurance charges, if any (Lumpsum or %) Freight & Insurance charges from Dispatching station to BHEL, Tiruchirappalli (Note: If the delivery terms is Ex Works the materials has to be sent through BHEL approved carrier only, in this case the freight & Insurance will be borne by BHEL)							
7	Approximate Net weight of the total consignment							
8	Approximate Gross weight of the total consignment							
9	Approximate Dimensions of the Consignment							

Signature & Seal of Vendor

he price bid should be submitted only as per the above format. No row shall be left blank. Please indicate NA, in case the item is "not applicable"