



BHARAT HEAVY ELECTRICALS LIMITED

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

PHONE :2577331
GRAMS : BHARATELEC
FAX NO: 2520719
E-mail: srchandran@bheltry.co.in
Web:

	Enquiry No 2661500250 - 75	Enquiry Date 09.07.2015	Due Date for Quotation 07.08.2015
<p>Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order. <i>Bid should be submitted in two parts. 1.Techno-commercial bid (Part-I) and 2.Price bid(Part-II) in a separate sealed cover and both covers must be placed in a third cover and sealed. Our Enquiry No., Enq. date & Enq. Due date must be written on all three covers.</i></p>			

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	<p>Online Stack Emission Monitoring System Part A:- Pre-Qualification Criteria 1. Bidder shall be either an OEM or authorised dealer for online monitoring of stack emission systems meeting the CPCB guidelines. In case of dealers, vendor should provide valid dealership certificate. 2. Bidder should have designed, supplied and installed "Online Continuous Stack Emission Monitoring Systems" of pollution parameters, for LPG furnaces/ gas engines/ diesel engines etc. as per CPCB/ TNPCCB guidelines. Vendor shall provide copy of purchase orders/work orders as proof of the same. 3 Performance certificate from at least one of the customers regarding satisfactory performance of the complete system supplied to them should be provided with the offer. Part B:- Compliance Statement Sheet for Installation of Online Stack Emission Monitoring System 1.0 General Requirements 1.1 Installation and commissioning of a real time web uploading system (online monitoring system) for uploading of stack emission parameters of LPG fired furnace (70 ton capacity) and two diesel generator sets (2000 kVA and 1000 kVA capacity). The monitored data has to be captured in individual stack emission monitors which should be connected to a common PC through wireless communication. PC (with specification mentioned below) will be provided by BHEL. This PC should be used as a server to upload the stack emission data to internet via a public domain IP address. Suitable Server Software shall be provided by the vendor. Installation, configuration, running of the server shall be done by the</p>	NO	3.000	3.00	09.11.15

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.

Yours faithfully,
For **BHARAT HEAVY ELECTRICALS LIMITED**
For Ego 258
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MANAGER / PURCHASE
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vendor on the PC provided by BHEL. Suitable front end web page to monitor the parameters from the server shall be developed/ provided by the vendor. All necessary hardwares and softwares to capture the data, transmit it through wireless communication, to receive and store the data at the PC and to upload it on the internet as per the latest CPCB/ TNPCB guidelines for Online Continuous Monitoring System as per the needs of CPCB/ TNPCB are in vendor's scope.

1.2 The entire work shall be carried out adhering to all relevant standards and regulations.

1.3 Vendor is advised to visit the site and get all details as may be required, prior to submitting the offer. On award of the work, vendor shall have to depute their engineer to site to collect data and for technical discussion with BHEL's personnel.

1.4 The system in each area shall be independent with respect to the data acquisition and monitoring functions. In case the monitoring system of one area fails, it shall be possible to continue the data acquisition and monitoring functions of the other areas.

1.5 Provision should be incorporated in the system to connect one more stack emission monitor (for one more furnace) in future.

2.0 Scope of Supply and Work

2.1 Complete set of equipment for the online monitoring system such as stack emission monitors, data acquisition hardware, HMI/ operator interfaces and online data uploading system, signal/protocol converters, power supply units, cables, connectors and other accessories as required for normal functioning of the system are in vendor's scope.

2.2 All required softwares for the system such as data acquisition, HMI, data logger, data concentrator, web uploading, web application etc. are in vendor's scope. The scope shall also include development of a data acquisition and monitoring system as required for continuous data collection from the field instruments and monitoring the data and hosting the same to the server. The dedicated broadband connection will be provided by BHEL.

2.3 Any item, hardware or software, additional to that specified above,

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required for obtaining satisfactory performance of the system is under vendor's scope. Any such item required for the system shall be clearly mentioned in the technical offer. Any item not mentioned in vendor's offer but found required during testing or commissioning shall be supplied by the vendor without any extra cost.

2.4 All softwares supplied shall be along with appropriate comprehensive licenses for permanent use of the softwares.

The scope shall include free upgrade of vendor's software for the data acquisition system, monitoring and web uploading, for a period of at least 5 years from date of commissioning of the system. The vendor should support for upgrading as and when required during this period.

2.5 All works related to inserting the probes in to the chimney will be in vendor's scope. Vendor should bring all tools and consumable items required for mounting the probes and routing of various cables and tubes. Only welding machine, gas cutting machine and welding electrodes will be issued by BHEL at free of cost, if required. Three phase/ single phase power points will also be provided by BHEL at the respective control rooms of the furnace/ DG.

2.6 The system should consist of but not limited to the following units

Field elements:- The field elements should include probe with suitable filters, dryer (if required), gas analyzers, dust monitors etc.

Signal converters and amplifiers

Data acquisition system

Wireless communication system (transmitter and receiver)

Real time web uploading systems

Networking accessories

Licensed version of all required softwares. Back up for all the used softwares should be provided in separate CDs for easy re-installation, if required, in future.

Outdoor LED display unit

3.0 Gas Analyzer

3.1 Gases to be analyzed: Simultaneous and continuous measurement of

NO_x, SO_x, CO components of flue gases.


3.2 Measurement principle: Non Dispersive Infra-Red Spectroscopy. Vendor to confirm.

3.3 Measurement range for NO_x, SO_x, CO:

NO_x:0-2000 ppm

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- SOx: 0-2000 ppm
CO: 0-5000 ppm
3.4 Ambient temperature: Up to 50 deg C.
3.5 Gas temperature range: Up to 300 deg C.
3.6 Resolution: 0.1% on % or 1 PPM on PPM
3.7 Accuracy: 2% of reading or better
3.8 Response time: Maximum 60 seconds.
3.9 Display: Graphical display.
3.10 Keypad: Touch screen.
3.11 Linearity: +/-1% of full scale for
< 1000 ppm; +/-2.5% of full scale for >
1000 ppm
3.12 Output signal: Minimum 6 linear, isolated,
4-20 mA output, load 500
ohm (selectable)
3.13 Interference: Interference minimization
techniques should be
incorporated to reduce the effects of
interference from other gas
components.
3.14 Sampling unit: The gas analyzer should
consist of a sampling system
that includes suction pump, electronic cooler
unit (for dehumidifying
the sample gas), dust filter, flow meter, needle
valve, flanges,
switching system between sample and
calibration lines etc.
3.15 Sampling probe: Sampling probe of
suitable material with all
necessary accessories like flange, air blower, air
tubes, primary filter
etc. should be supplied by the vendor.
3.16 Power supply: 180 - 260 V AC, 50Hz.
3.17 Power rating: Vendor to specify.
3.18 Auto calibration facility: Built in calibration
facility should be
incorporated in the instrument. Auto calibration
unit should be supplied
with calibration gas cylinders with regulators
and all required
accessories.
3.19 Communication interface:
RS232/USB/Ethernet; compatible software/
modem for PC communication and data
download from the internal memory of
the instrument.
3.20 Software: User friendly data format
transferrable to user software
and data logger.
3.21 Dimension: Vendor has to mention the
physical dimension of the
equipment.
3.22 Calibration certificate: Calibration
certificate/ test certificate
from authorized agency should be provided.
3.23 Make and model: Only reputed makes like
Yokogawa, Siemens, Horiba,
Fuji, Resems Instruments or any other make
acceptable to BHEL. Vendor

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has to mention the make and model no of the instrument in the offer.

4.0 Dust Monitor for Suspended Particulate Matter

4.1 Device Type: Probe type

4.2 Measurement principle: BHEL prefers opacity-light of loss /Dual beam

method. Vendor to provide technical details with merits and demerits if

other techniques/ principles are offered. BHEL has the right to decide

regarding acceptability of other techniques during technical discussion.

4.3 Measuring transmission: 100 - 0%

4.4 Measuring opacity: 0 - 100%

4.5 Measuring optical density: 0 - 3%

4.6 Measuring dust concentration: 0 - 1000 mg/Nm³

4.7 Display: Graphic User Interface.

4.8 Keypad: Suitable touchscreen keypad to be provided.

4.9 Test function: Manual and auto calibration facility should be provided.

4.10 Automatic zero and span calibration check: Provision to be made for

zero, span and 100% calibration check.

4.11 Accuracy: $\pm 0.2\%$ full scale.

4.12 Gas temperature range: Up to 300 deg C

4.13 Ambient temperature: Up to 50 deg C.

4.14 Interface: Remote control unit, RS-232, RS-485 interface

etc. Vendor to specify.

4.15 Relay outputs: System ok, maintenance, low & high alarm,

status, blower status, power failure, calibration indication, failsafe

shutter failure indication, etc..

4.16 Fail safe shutter: Automatic fail safe shutter should be provided.

4.17 Purge air blower: Purge air blower with necessary filter should be supplied.

4.18 Make and model: Only reputed makes like Yokogawa, Siemens, Forbes

Marshall, Emerson, Horiba, Resems Instruments or any other make

acceptable to BHEL. Vendor has to mention the make and model no of the instrument in the offer.

5.0 Wireless Communication System

5.1 Wi fi communication systems should be installed for data

communication between analyser rooms (3 locations) and control room. One

such communication systems should be used for communication between

control room computer and the outdoor display.

5.2 Transmitters and Receivers

Suitable transmitters and receivers have to be

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supplied for
communication from the analyser rooms to the
control room.

Features: Embedded real time operating system,
new generation web based
HMI interface compatibility
Communication interface: Wi fi, RS232, RS485,
USB 2.0 etc.

User interface: Graphic User Interface with
touchscreen keypad.

Memory: Up to 128 MB

Screen memory: Up to 45 MB

Analog inputs: Minimum 6, fully isolated

Analog outputs: 4 nos.

6.0 Data Acquisition System

6.1 The data from the on-line analyzers
available at the three locations

has to be gathered by a Data Acquisition
System (DAS) to a PC based
system and the data has to be uploaded to a
dedicated web server through
internet via a dedicated broadband connection
(to be provided by BHEL)

with external IP address of 1 Mbps speed.

Whenever required, the
uploaded live data can be accessed with the IP
at TNPCB office by
logging on to the remote server IP address. The
specification of the
data acquisition system is mentioned below.

6.2 No of components: Minimum data logging
of 8-channels

6.3 Types of input: Universal inputs such as
4-20 mA DC, RS485, RS232
etc.

6.4 Power supply: 180 - 260 V AC, 50Hz.

6.5 Display: Local display of all the channels

6.6 PC connectivity: Through USB,
Wireless,RS232/485. It has to be
connected to the PC provided by BHEL, the
specification of which is

mentioned below. If any accessory is required
for interconnection, it
would be in vendor's scope.

6.7 Interface device: Suitable for various signal
inputs with high
isolation between input power supply and
output.

7.0 Outdoor LED Display Unit

7.1 Analyser data: Software data to be directly
sent to the display unit
through Wi-Fi communication.

7.2 Application: Online display

7.3 Size of the display: L x H: 6 feet x 3 feet

7.4 Visibility Range: 80-100 meters

7.5 No of display lines: Minimum 4 lines

7.6 Display of color elements: Red/ multi colour


7.7 Minimum life span: 5 years

7.8 Ambient temperature: 50 deg C

7.9 Humidity range: 0-100%.

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- 7.10 Language: English
7.11 Display casing: Weatherproof casing
7.12 Communication: Wi fi based wireless communication system.
Transmitter and receiver have to be supplied by vendor.
7.13 Mounting: Display unit stand and canopy should be supplied and installed by the vendor.
8.0 Documentation
8.0.a Documents to be sent along with the offer
8.0.a.1 Technical datasheets of all the hardwares.
8.0.a.2 Circuit diagram/ block diagram and P&I diagrams.
8.0.a.3 Performance certificate of online stack emission monitoring system from at least one of the customers of the vendor.
8.0.b Documents to be supplied with materials
8.0.b.1 Three sets of following documents (hard copies) in English should be supplied. One copy in CD should also be supplied.
8.0.b.2 O&M manual of all the equipment like gas analyser, recorder, signal converter, probe etc.
8.0.b.3 Detailed drawings of the system.
8.0.b.4 Complete master list of parts (BoM) used in the system.
8.0.b.5 Drawings showing all interconnections in block level and circuit level.
8.0.b.6 The supplier should produce valid calibration and test certificates for all the instruments and the supplier should provide details of the sources from where we can get the certificates in future.
9.0 Erection and Commissioning
9.1 The supplier has to take full responsibility for carrying out the erection, start up, testing of stack emission monitoring system and all other supporting equipment.
9.2 All required tools, equipment and instruments for erection and commissioning should be brought by the supplier.
9.3 Commissioning spares required for commissioning of the stack monitoring system shall be brought by the supplier on returnable basis.
10.0 Guarantee: The vendor should offer guarantee for all the hardware and software components for 18 months from the date of supply or 12 months from the date of commissioning, whichever is earlier.

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11.0 Acceptance (tests/ activities to be performed by vendor after commissioning)
11.1 Vendor should demonstrate all features of the complete system to BHEL personnel.
11.2 Supplier's representatives should impart training for BHEL personnel regarding operation and maintenance of the online stack monitoring system.
11.3 The supplier has to co-ordinate with TNPCB officials and should demonstrate the functioning (performance prove out) of the system as per their requirement.
12.0 BHEL's Scope
12.1 BHEL will provide desktop PC, UPS, printer, broadband connection with following specifications
12.2 Operating system: Windows 7 professional version.
12.3 System type: 64 bit operating system.
12.4 Processor: Intel i5-2400 CPU @ 3.10 GHz.
12.5 RAM: 4 GB
12.6 Monitor: 17" LCD monitor.
12.7 Accessories: Keyboard, mouse.
12.8 UPS: 500 VA
12.9 Broadband connection: Uplink speed: 1 Mbps
Modem will be provided by BHEL. One fixed external IP will be provided.
Configuration of the modem so as to access the server from outside shall be done by the vendor.
12.10 Power supply: BHEL will provide only 230 V, 50 Hz AC supply at the analyser rooms, the control room and near the outdoor display unit. If any other voltage (like 24 V supply etc.) is required, vendor has to provide suitable equipment for that.
13.0 Budgetary offer for AMC (optional):
Vendor has to quote the budgetary price (with scope of work) for AMC of the complete system separately for 1 year, 2 years, 3 years, 4 years and 5 years, starting after the guarantee period.


General Note:

1. POINT-BY-POINT CONFIRMATION TO BHEL'S SPECIFICATIONS, COMMERCIAL TERMS & CONDITIONS ARE TO BE PROVIDED BY THE VENDORS IN "ANNEXURE A & B.

2. FILL UP ANNEXURE A. PLEASE ENSURE THAT ALL TERMS & CONDITIONS SHOULD BE INDICATED IN THE UN-PRICED BID TO BE ATTACHED WITH THE

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TECHNO-COMMERCIAL BID POSITIVELY.

3. VALIDITY OF THE OFFER SHOULD NOT BE LESS THAN 90 DAYS.
4. THE ORDER WILL BE PLACED ON INDIVIDUAL ITEMWISE L1 BASIS
5. THE BIDDER SHALL MEET PRE-QUALIFICATION CRITERIA
6. WHEREVER FOR SPLITTING OF ORDER AS PER ANNEXURE II CLAUSE 27,IF SPLITTED QUANTITY COMES OUT <1 ,THE SPLITTING OF ORDER WILL NOT BE FEASIBLE. (For MSE vendors)
7. BHEL Reserves The Right To Go For A Reverse Auction (RA) Instead Of Opening The Submitted Sealed Price Bid, Which Will Be Decided After Technical Evaluation.
All bidders to give their acceptance for participation in RA.
Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA. Information And General Terms And Conditions Covering RA Are Given In Annexure-I
(Also refer Annexure-II)

LIST OF ATTACHMENTS:

- 1.Pre qualification criteria
2. ANNEXURE-II TERMS AND CONDITIONS OF THE ENQUIRY. (TWO PART-BID)
3. ANNEXURE-V- CA certificate format(as per MSMED act 2006) to be furnished , if applicable -Refer ANNEXURE II CLAUSE 27 (For MSE vendors)
- 4.ANNEXURE-A CHECK LIST FOR TECHNICAL & COMMERCIAL TERMS CONFIRMATION-TO BE FILLED BY THE SUPPLIER.
5. ANNEXURE-B MODEL PRICE BID FORMAT.
6. ANNEXURE-VI CHECK LIST TO BE SUBMITTED ALONG WITH OFFER
7. Compliance statement to be confirmed by vendor
- 8.ANNEXURE-I- GENERAL TERMS & CONDITIONS OF RA
- 9.ANNEXURE-C -CHECKLIST FOR RA CONDUCTANCE

All the tenders may be addressed to the following address:

**The Tender Opening Cell / MM
Room No: 26, Building 24, Ground Floor
Bharat Heavy Electricals Limited
TIRUCHIRAPALLI 620014**

In case personal delivery of the offer, it shall be dropped into the respective box kept in Room No: 26, after duly entering the data in the system.

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Offers will be accepted only up to 14.00 Hrs on the due date. Therefore, vendors shall ensure to submit the offers well before this time. All due date extension requirements should be addressed to the respective Purchase mail IDs. All the due date extension requests from vendors will be considered only up to 48 hours before the due date and time.

Vendors are requested to avoid submission of offers through e mail / fax. In case of any unavoidable situation, offers shall be sent through e mail to the following mail ID only tender_cell@bheltry.co.in.

As tenders are being opened by Common Tender Opening Cell, offer covers should be sealed with tenderer's distinctive seal and super scribed with correct Tender No. item of supply and due date of opening.

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Enclosures:

"LD clause has to be confirmed without fail."

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Part A:- Pre-Qualification Criteria for Installation of Online Stack Emission Monitoring System

SI No	BHEL's Requirement	Vendor's Response
1	Bidder shall be either an OEM or authorised dealer for online monitoring of stack emission systems meeting the CPCB guidelines. In case of dealers, vendor should provide valid dealership certificate.	
2	Bidder should have designed, supplied and installed "Online Continuous Stack Emission Monitoring Systems" of pollution parameters, for LPG furnaces/ gas engines/ diesel engines etc. as per CPCB/ TNPCB guidelines. Vendor shall provide copy of purchase orders/work orders as proof of the same.	
3	Performance certificate from at least one of the customers regarding satisfactory performance of the complete system supplied to them should be provided with the offer.	

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02.07.15

Part B:- Compliance Statement Sheet for Installation of Online Stack Emission Monitoring System

SI No	BHEL's Desired Parameter/ Specification	Vendor's Comments
1.0	General Requirements	
1.1	<p>Installation and commissioning of a real time web uploading system (online monitoring system) for uploading of stack emission parameters of LPG fired furnace (70 ton capacity) and two diesel generator sets (2000 kVA and 1000 kVA capacity). The monitored data has to be captured in individual stack emission monitors which should be connected to a common PC through wireless communication. PC (with specification mentioned below) will be provided by BHEL. This PC should be used as a server to upload the stack emission data to internet via a public domain IP address. Suitable Server Software shall be provided by the vendor. Installation, configuration, running of the server shall be done by the vendor on the PC provided by BHEL. Suitable front end web page to monitor the parameters from the server shall be developed/ provided by the vendor. All necessary hardwares and softwares to capture the data, transmit it through wireless communication, to receive and store the data at the PC and to upload it on the internet as per the latest CPCB/ TNPCB guidelines for Online Continuous Monitoring System as per the needs of CPCB/ TNPCB are in vendor's scope.</p>	
1.2	<p>The entire work shall be carried out adhering to all relevant standards and regulations.</p>	
1.3	<p>Vendor is advised to visit the site and get all details as may be required, prior to submitting the offer. On award of the work, vendor shall have to depute their engineer to site to collect data and for technical discussion with BHEL's personnel.</p>	
1.4	<p>The system in each area shall be independent with respect to the data acquisition and monitoring functions. In case the monitoring system of one area fails, it shall be possible to continue the data acquisition and monitoring functions of the other areas.</p>	
1.5	<p>Provision should be incorporated in the system to connect one more stack emission monitor (for one more furnace) in future.</p>	
2.0	Scope of Supply and Work	
2.1	<p>Complete set of equipment for the online monitoring system such as stack emission monitors, data acquisition hardware, HMI/ operator interfaces and online data uploading system, signal/protocol converters, power supply units, cables, connectors and other accessories as required for normal functioning of the system are in vendor's scope.</p>	

Part B:- Compliance Statement Sheet for Installation of Online Stack Emission Monitoring System

SI No	BHEL's Desired Parameter/ Specification	Vendor's Comments
2.2	All required softwares for the system such as data acquisition, HMI, data logger, data concentrator, web uploading, web application etc. are in vendor's scope. The scope shall also include development of a data acquisition and monitoring system as required for continuous data collection from the field instruments and monitoring the data and hosting the same to the server. The dedicated broadband connection will be provided by BHEL.	
2.3	Any item, hardware or software, additional to that specified above, required for obtaining satisfactory performance of the system is under vendor's scope. Any such item required for the system shall be clearly mentioned in the technical offer. Any item not mentioned in vendor's offer but found required during testing or commissioning shall be supplied by the vendor without any extra cost.	
2.4	All softwares supplied shall be along with appropriate comprehensive licenses for permanent use of the softwares. The scope shall include free upgrade of vendor's software for the data acquisition system, monitoring and web uploading, for a period of at least 5 years from date of commissioning of the system. The vendor should support for upgrading as and when required during this period.	
2.5	All works related to inserting the probes in to the chimney will be in vendor's scope. Vendor should bring all tools and consumable items required for mounting the probes and routing of various cables and tubes. Only welding machine, gas cutting machine and welding electrodes will be issued by BHEL at free of cost, if required. Three phase/ single phase power points will also be provided by BHEL at the respective control rooms of the furnace/ DG.	
2.6	The system should consist of but not limited to the following units	
	Field elements:- The field elements should include probe with suitable filters, dryer (if required), gas analyzers, dust monitors etc.	
	Signal converters and amplifiers	
	Data acquisition system	
	Wireless communication system (transmitter and receiver)	
	Real time web uploading systems	
	Networking accessories	
	Licensed version of all required softwares. Back up for all the used softwares should be provided in separate CDs for easy re-installation, if required, in future.	
Outdoor LED display unit		

Part B:- Compliance Statement Sheet for Installation of Online Stack Emission Monitoring System

SI No	BHEL's Desired Parameter/ Specification		Vendor's Comments
3.0	Gas Analyzer		
3.1	Gases to be analyzed	Simultaneous and continuous measurement of NOx, SOx, CO components of flue gases.	
3.2	Measurement principle	Non Dispersive Infra-Red Spectroscopy. Vendor to confirm.	
3.3	Measurement range for NOx SOx CO	NOx:0-2000 ppm SOx: 0-2000 ppm CO: 0-5000 ppm	
3.4	Ambient temperature	Up to 50 deg C.	
3.5	Gas temperature range	Up to 300 deg C.	
3.6	Resolution	0.1% on % or 1 PPM on PPM	
3.7	Accuracy	2% of reading or better	
3.8	Response time	Maximum 60 seconds.	
3.9	Display	Graphical display.	
3.10	Keypad	Touch screen.	
3.11	Linearity	+/-1% of full scale for < 1000 ppm; +/-2.5% of full scale for > 1000 ppm	
3.12	Output signal	Minimum 6 linear, isolated, 4-20 mA output, load 500 ohm (selectable)	
3.13	Interference	Interference minimization techniques should be incorporated to reduce the effects of interference from other gas components.	
3.14	Sampling unit	The gas analyzer should consist of a sampling system that includes suction pump, electronic cooler unit (for dehumidifying the sample gas), dust filter, flow meter, needle valve, flanges, switching system between sample and calibration lines etc.	
3.15	Sampling probe	Sampling probe of suitable material with all necessary accessories like flange, air blower, air tubes, primary filter etc. should be supplied by the vendor.	

Part B:- Compliance Statement Sheet for Installation of Online Stack Emission Monitoring System

SI No	BHEL's Desired Parameter/ Specification		Vendor's Comments
3.16	Power supply	180 - 260 V AC, 50Hz.	
3.17	Power rating	Vendor to specify.	
3.18	Auto calibration facility	Built in calibration facility should be incorporated in the instrument. Auto calibration unit should be supplied with calibration gas cylinders with regulators and all required accessories.	
3.19	Communication interface	RS232/USB/Ethernet; compatible software/ modem for PC communication and data download from the internal memory of the instrument.	
3.20	Software	User friendly data format transferrable to user software and data logger.	
3.21	Dimension	Vendor has to mention the physical dimension of the equipment.	
3.22	Calibration certificate	Calibration certificate/ test certificate from authorized agency should be provided.	
3.23	Make and model	Only reputed makes like Yokogawa, Siemens, Horiba, Fuji, Resems Instruments or any other make acceptable to BHEL. Vendor has to mention the make and model no of the instrument in the offer.	
4.0	Dust Monitor for Suspended Particulate Matter		
4.1	Device Type	Probe type	
4.2	Measurement principle	BHEL prefers opacity-light of loss /Dual beam method. Vendor to provide technical details with merits and demerits if other techniques/ principles are offered. BHEL has the right to decide regarding acceptability of other techniques during technical discussion.	
4.3	Measuring transmission	100 - 0%	
4.4	Measuring opacity	0 - 100%	
4.5	Measuring optical density	0 - 3%	
4.6	Measuring dust concentration	0 - 1000 mg/Nm ³	
4.7	Display	Graphic User Interface.	
4.8	Keypad	Suitable touchscreen keypad to be provided.	
4.9	Test function	Manual and auto calibration facility should be provided.	
4.10	Automatic zero and span calibration check	Provision to be made for zero, span and 100% calibration check.	
4.11	Accuracy	± 0.2% full scale.	

Part B:- Compliance Statement Sheet for Installation of Online Stack Emission Monitoring System

SI No	BHEL's Desired Parameter/ Specification		Vendor's Comments
4.12	Gas temperature range	Up to 300 deg C	
4.13	Ambient temperature	Up to 50 deg C.	
4.14	Interface	Remote control unit, RS- 232, RS-485 interface etc. Vendor to specify.	
4.15	Relay outputs	System ok, Maintenance, low & high Alarm, status, blower status, power failure, calibration indication, failsafe shutter failure indication, etc..	
4.16	Fail safe shutter	Automatic fail safe shutter should be provided.	
4.17	Purge air blower	Purge air blower with necessary filter should be supplied.	
4.18	Make and model	Only reputed makes like Yokogawa, Siemens, Forbes Marshall, Emerson, Horiba, Resems Instruments or any other make acceptable to BHEL. Vendor has to mention the make and model no of the instrument in the offer.	
5.0	Wireless Communication System		
5.1	Wi fi communication systems should be installed for data communication between analyser rooms (3 locations) and control room. One such communication system should be used for communication between control room computer and the outdoor display.		
5.2	Transmitters and Receivers		
	Suitable transmitters and receivers have to be supplied for communication from the analyser rooms to the control room.		
	Features	Embedded real time opearting system	
		New generation web based HMI interface compatibility	
	Communication interface	Wi fi, RS232, RS485, USB 2.0 etc.	
	User interface	Graphic User Interface with touchscreen keypad.	
	Memory	Upto 128 MB	
	Screen memory	Upto 45 MB	
	Analog inputs	Minimum 6, fully isolated	
Analog outputs	4 nos.		

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Part B:- Compliance Statement Sheet for Installation of Online Stack Emission Monitoring System

SI No	BHEL's Desired Parameter/ Specification		Vendor's Comments
6.0	Data Acquisition System		
6.1	The data from the on-line analyzers available at the three locations has to be gathered by a Data Acquisition System (DAS) to a PC based system and the data has to be uploaded to a dedicated web server through internet via a dedicated broadband connection (to be provided by BHEL) with external IP address of 1 Mbps speed. Whenever required, the uploaded live data can be accessed with the IP at TNPCB office by logging on to the remote server IP address. The specification of the data acquisition system is mentioned below.		
6.2	No of components	Minimum data logging of 8-channels	
6.3	Types of input	Universal inputs such as 4-20 mA DC, RS485, RS232 etc.	
6.4	Power supply	180 - 260 V AC, 50Hz.	
6.5	Display	Local display of all the channels	
6.6	PC connectivity	Through USB, Wireless,RS232/485. It has to be connected to the PC provided by BHEL the specification of which is mentioned below. If any accessory is required for interconnection, it would be in vendor's scope.	
6.7	Interface device	Suitable for various signal inputs with high isolation between input power supply and output.	
7.0	Outdoor LED Display Unit		
7.1	Analyser data	Software data to be directly sent to the display unit through Wi-Fi communication.	
7.2	Application	Online display	
7.3	Size of the display	L x H: 6 feet x 3 feet	
7.4	Visibility Range	80-100 meters	
7.5	No of display lines	Minimum 4 lines	
7.6	Display of color elements	Red /multi colour	
7.7	Minimum life span	5 years	

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Part B:- Compliance Statement Sheet for Installation of Online Stack Emission Monitoring System

SI No	BHEL's Desired Parameter/ Specification		Vendor's Comments
7.8	Ambient temperature	50 deg C	
7.9	Humidity range	0-100%.	
7.10	Language	English	
7.11	Display casing	Weatherproof casing	
7.12	Communication	Wi fi based wireless communication system. Transmitter and receiver has to be supplied by vendor.	
7.13	Mounting	Display unit stand and canopy should be supplied and installed by the vendor.	
8.0	Documentation		
8.0.a	Documents to be sent along with the offer		
8.0.a.1	Technical datasheets of all the hardwares.		
8.0.a.2	Circuit diagram/ block diagram and P&I diagrams.		
8.0.a.3	Performance certificate of online stack emission monitoring system from at least one of the customers of the vendor.		
8.0.b	Documents to be supplied with materials		
8.0.b.1	Three sets of following documents (hard copies) in English should be supplied. One copy in CD should also be supplied.		
8.0.b.2	O&M manual of all the equipment like gas analyser, recorder, signal converter, probe etc.		
8.0.b.3	Detailed drawings of the system.		
8.0.b.4	Complete master list of parts (BoM) used in the system.		
8.0.b.5	Drawings showing all interconnections in block level and circuit level.		
8.0.b.6	The supplier should produce valid calibration and test certificates for all the instruments and the supplier should provide details of the sources from where we can get the certificates in future.		
9.0	Erection and Commissioning		
9.1	The supplier has to take full responsibility for carrying out the erection, start up, testing of stack emission monitoring system and all other supporting equipment.		
9.2	All required tools, equipment and instruments for erection and commissioning should be brought by the supplier.		

Part B:- Compliance Statement Sheet for Installation of Online Stack Emission Monitoring System

SI No	BHEL's Desired Parameter/ Specification		Vendor's Comments
9.3	Commissioning spares required for commissioning of the stack monitoring system shall be brought by the supplier on returnable basis.		
10.0	Guarantee: The vendor should offer guarantee for all the hardware and software components for 18 months from the date of supply or 12 months from the date of commissioning, whichever is earlier.		
11.0	Acceptance (tests/ activities to be performed by vendor after commissioning)		
11.1	Vendor should demonstrate all features of the complete system to BHEL personnel.		
11.2	Supplier's representatives should impart training for BHEL personnel regarding operation and maintenance of the online stack monitoring system.		
11.3	The supplier has to co-ordinate with TNPCB officials and should demonstrate the functioning (performance prove out) of the system as per their requirement.		
12.0	BHEL's Scope		
12.1	BHEL will provide desktop PC, UPS, printer, broadband connection with following specifications		
12.2	Operating system	Windows 7 professional version.	
12.3	System type	64 bit operating system.	
12.4	Processor	Intel i5-2400 CPU @ 3.10 GHz.	
12.5	RAM	4 GB	
12.6	Monitor	17" LCD monitor.	
12.7	Accessories	Keyboard, mouse.	
12.8	UPS	500 VA	
12.9	Broadband connection	Uplink speed: 1 Mbps Modem will be provided by BHEL. One fixed external IP will be provided. Configuration of the modem so as to access the server from outside shall be done by the vendor.	
12.10	Power supply	BHEL will provide only 230 V, 50 Hz AC supply at the analyser rooms, the control room and near the outdoor display unit. If any other voltage (like 24 V supply etc.) is required, vendor has to provide suitable equipment for that.	
13.0	Budgetary offer for AMC (optional): Vendor has to quote the budgetary price (with scope of work) for AMC of the complete system separately for 1 year, 2 years, 3 years, 4 years and 5 years, starting after the guarantee period.		

Terms & Conditions of Reverse Auction

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

1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
2. Those bidders who have given their acceptance for Reverse Auction (quoted against this tender enquiry) will have to necessarily submit „online sealed bid" in the Reverse Auction. Non-submission of "online sealed bid" by the bidder for any of the eligible items for which techno-commercially qualified, will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.
3. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
4. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
5. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
6. Bidders have to fax the Compliance form before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
7. In line with the NIT terms, BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at "Total Cost to BHEL" like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.
8. Reverse auction will be conducted on scheduled date & time.
9. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.

10. The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, if required, as provided on case-to-case basis to Service provider within two working days of Auction without fail.
11. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL's standard practice.
12. Bidders shall be required to read the "Terms and Conditions" section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the „Business Rules of Reverse Auction", which will be communicated before the Reverse Auction.
13. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action *as per extant BHEL guidelines*, shall be initiated by BHEL and the results of the RA scrapped/ aborted.
14. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.
15. In case BHEL decides to go for reverse auction, the H1 bidder (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process.

ANNEXURE -C

CHECK LIST FOR RA CONDUCTANCE

<p>General terms and conditions, Commercial terms and conditions acceptance for participation in Reverse auction (RA) on individual item wise L1 basis</p> <p>Yes/No to be indicated</p>	<p>Vendor's confirmation- Yes/No</p> <p>.....</p>
<p>Name of the person for participating in reverse auction.</p>	
<p>Land Line Number</p>	
<p>Fax Number</p>	
<p>Mobile Number</p>	
<p>E-mail ID</p>	

TERMS AND CONDITIONS OF THE ENQUIRY (TWO PART BID)

1. The tender will be operated on two part bid basis i.e. (I).Techno-Commercial Bid & (II).Price Bid.
 2. Techno-Commercial Bid: Containing Technical details, specifications, commercial terms and conditions like percentage of Freight & Insurance, ED WITH CESS, Taxes ,delivery terms, delivery schedule, validity of offer, payment terms (except price details), acceptance for LD clause, RP clause etc. as per ANNEXURE-A shall be put in a cover (1) and super scribed as "Techno-Commercial Bid" for Enquiry No:Dt:Due Dt.:
 3. Price Bid: Containing the price details shall be put in a separate cover (2) and superscripted as "Price Bid" for Enquiry No:Dt:Due Dt.: as per ANNEXURE –B (submitted in your company letter head)
 4. You are requested to put the above two envelopes (Techno-Commercial Bid & Price Bid) inside a separate larger sealed envelope and this envelope shall be super scribed as "Techno-Commercial Bid and Price Bid" for Enquiry No:Dt:Due Dt.:
- Your Quotations should be sent to:
The Tender Opening Cell/MM
Room No-26 , Building - 24 , Ground Floor
Bharat Heavy Electrical Limited
Tiruchirapalli- 620014 .

In case personal delivery of the offer , it shall be dropped into the respective box after duly entering the data in the system kept in room no 26 .

Vendors are requested to avoid submission of offers thro email / fax . In case of any unavoidable situation, offers shall be sent thro email to the following mail ID only " tender_ cell@bheltry.co.in "

As such Tenders are being opened by Common Tender opening Cell , offer covers should be sealed with tender's distinctive seal and super scribed with correct Tender NO, item of supply and due date of Opening .

5. Tender should not be addressed to any individual's name but only by designation.
6. Tenders should be free from CORRECTION AND ERASURES. Corrections if any must be attested; all amounts shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall only be considered.
7. Please submit point wise compliance to our specifications, terms and conditions. Otherwise it will be presumed that you are accepting BHEL's terms and conditions. Fill Up Annexure A. Please Ensure That All Terms & Conditions Should Be Indicated in The Un-Priced Bid To Be Attached With The Techno-Commercial Bid Positively(ANNEXURE-A)
8. Offer/s received after due date and time: **02:00 pm** will not be considered under any circumstances.
9. **Validity** of quoted rates should be maintained minimum for **90 days** from the date of Tender opening for ordering (Technical Bid). The quoted/Finalized rates shall be Firm till completion of the supplies.
10. The rates are to be quoted on **F.O.R. BHEL THIRUMAYAM/PUDUKKOTTAI Distt-622507** basis (Inclusive of Packing, Forwarding) .If any Freight & Transit Insurance charges which are payable to supplier is applicable, please indicate extra in %.. All the items should be supplied at our stores, BHEL **THIRUMAYAM/PUDUKKOTTAI Distt-622507** at your own cost. Offers with any other delivery conditions is not acceptable .

IMPORTANT NOTE: (I) Delivery condition like Ex-works / Ex-godown / Transportation of materials through transport carriers from your works up to the transport carrier's office at THIRUMAYAM and taking delivery of goods by BHEL from such office of transport carriers is not acceptable to us)

11. Payment Terms (Indigenous)

Payment term is 100% direct payment after 45 days from the date of receipt and acceptance of materials.

Any deviation in the above payment term will attract loading as mentioned below.

"Base rate of SBI (as applicable on the date of bid opening. Techno-commercial bid opening in case of two part bids) + 6% shall be considered for loading for the period of relaxation sought by bidders.

Payment through Bank is not preferred. In case of Payment through Bank is opted by Supplier, BHEL prefers documents submission through bank with copy of LR and door delivery of Goods to Site/Stores with Consignee copy attached. In this case Loading will be 3% on the offered value.

Offers of indigenous Suppliers with payment terms as LC/Advance Payment are liable for rejection.

Payment term for supply portion(For import supplies)

BHEL Payment term is 100% payment on CAD basis after 45 days from the date of receipt of documents, specified in PO, at BHEL bank. Respective bank charges to respective account.

Any deviation in the above payment term will attract loading as mentioned below.

“Base rate of SBI (as applicable on the date of bid opening. Techno-commercial bid opening in case of two part bids) + 6% shall be considered for loading for the period of relaxation sought by bidders.

In the case of Usance LCs the loading will be considered @ 1.5% on the offered Value.

For LC at sight the loading will be considered @ 3.5% on the offered Value.

Normally CAD at sight and Confirmed LCs are liable for rejection.

Payment terms for Indian agent:

Indian Agency Commission ,if any, shall be clearly specified in the offer and the same will be paid in Indian Rupees against acceptance of the materials

12. Liquidated Damages / Penalty:-

The delivery of the goods specified in the purchase order should be made within the time prescribed. LD for delay in ‘Supply’ and/or ‘E&C’ will be applicable to the delays attributed to vendor. LD will be considered separately for ‘Delivery’ and ‘E&C’. Where the seller supplies or dispatches the goods, beyond the delivery period Liquidated damages shall be applicable 0.5% of the total order value per week or part thereof subject to a maximum of 10% of the total order value.

Material Despatched after Due date: Once the delivery due date is crossed, bills have to be clubbed till final despatch and forwarded for processing of payment as a single bunch. LD percentage will be calculated from Delivery due date to final despatch date.

The rate of LD for delayed E&C shall be @ 0.5% per week of delay of total PO value (Supply + E&C) in E&C subject to a maximum of 10% of total PO value (Supply + E&C).

For staggered delivery schedule, LD shall be 0.5% of the undelivered portion per week of the delay or part thereof subject to a maximum of 10% of the total order value.

Any deviation from the above LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value).

For the purpose of Imposing LD, the FOB delivery (B/L date) shall be considered

13. If Guarantee / Warranty period is applicable as per tender specification, No deviation permitted and deviated offers are liable for rejection.

14. IMPORTANT NOTE: BHEL WILL CONSIDER THE RANKING AFTER THE LOADING IS APPLIED AS REFERRED ABOVE WHEREVER DEVIATIONS ARE OBSERVED.

15. No revision of prices will be entertained at any circumstances after tenders are opened.

16. If any sales tax is payable as extra to the quoted price it should be specifically stated in quotations along with CST & VAT Number failing which the purchaser will not be liable for payment of sales tax. Our TIN 33243560005 dt.01.01.2007 & CST no 239383 DT, 11.06.1991

17. On the due date of tender opening, only the technical bids will be opened. Technical bids will be evaluated by us and clarifications required, if any, will be called for from the bidders on technical and commercial points. The price bids of techno-commercially suitable bidders will be opened at a later date with prior intimation to respective suitable bidders.

18. Ranking L-1, L-2 etc. shall be done generally on each individual items for the techno-commercially acceptable offers on landed cost to BHEL, **THIRUMAYAM/PUDUKKOTTAI Distt-622507** basis and BHEL reserves the right to place order for individual items with different vendors. At special circumstance ranking shall be done on compatible basis which will be indicated through Enquiry special instruction General Notes.

19. BHEL reserves the right to increase or decrease the tender quantity and split up the tender quantity among more than one vendor at the lowest acceptable price to BHEL and place order accordingly in any proportion at our own discretion.

20. Lowest price received against BHEL tenders need not be the technically acceptable one and in that case BHEL reserves the right not to consider the same. The purchaser shall be under no obligation to accept the lowest or any other tender and shall be entitled to accept or reject any tender in part or full without assigning any reason whatsoever.

21. BHEL reserves the right to negotiate or refloat the tender opened, if L1 price is not the lowest acceptable price to BHEL due to inter-alia other reasons.

22. **PACKING AND MARKING:** The supplier shall arrange for securely protecting and packing the stores to avoid loss or damages during transit.

23. **RISK PURCHASE:** 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 previous supplier has failed to deliver or dispatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitutes therefore. The new supplier shall be liable for any loss, which the purchaser may sustain by reason of such risk purchases in addition to penalty at the rate mentioned in our LD clause.

24. **PREFERENTIAL DELIVERY:**(Applicable in the case of BHEL's Enquiry specifies Preferential Delivery in the Special Instructions) It should be noted if a contract is placed on a higher tendered as a result of this invitation to tender in preference to the lowest acceptable offer in consideration of the earlier delivery, the seller will be liable to pay to the purchaser the difference between the contract rate and that of the lowest acceptable tender on the basis of final price F.O.R destination, including all elements of freights, Sales tax, duties and other incidents, incidental in case of failure to complete supplies in terms of such contract within the date of delivery specified in the tender and incorporated in the contract, such difference amount in addition to penalty at the rate mentioned in our LD clause.

25. **CENVAT CREDIT:** 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 this input material, the effect of Performa credit should be passed on to the purchaser. Tenderer under "CENVAT" shall be preferred.

26. Any other conditions which might have been quoted by the seller and are in contravention to the terms prescribed in the order and which have not been specifically accepted by purchaser in written will not be applicable to the contract.

27. The bidder may also be a Micro and Small Enterprises (MSE) vendor registered as per MSE act. As per the public procurement policy notified by the Central government,

20% of the tendered quantity is earmarked for MSE suppliers in this tender.

Out of the 20% tendered quantity reserved for MSE suppliers, 4% shall be earmarked for procurement from MSE owned by SC / ST entrepreneurs.

In case MSE vendor participating in the tender quotes within the price band of L1 + 15%, they will be allowed to supply the portion of the requirement subject to acceptance of L1 price by MSE vendor. In case of more than one such MSE, the supply shall be shared proportionately.

"MSE suppliers can avail the intended benefits only if they submit along with the offer, attested copies of either EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM, II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (Format enclosed at Annexure -V where deemed validity of EM II certificate of five years has expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part I in case of two part bid). Non submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. Documents should be notarized or attested by a Gazetted officer. "

28. For verification of data submitted towards evaluation of bidder's capability, BHEL may decide to visit the bidder(s) works. Any fact found deviating from submitted data shall make the bidder liable to be disqualified.

29. In the event of more than one vendor becoming L1 for any of the item / items, the enquiry quantity for those item / items will be shared equally among all the L1 vendors.

30. The correspondence between the bidder and BHEL through email is considered as valid document Legally though not signed. It is treated as valid confirmations made on behalf of the respective company and comes under the legal ambit of the business transaction and hence binding on both the parties.

31. Equipment will be inspected and proved at vendor's works prior to dispatch, if applicable as per tender condition. However final inspection and acceptance of equipment will be after installation at BHEL, **THIRUMAYAM/PUDUKKOTTAI Distt-622507**.

32. Erection / commissioning charges , if applicable as per tender condition will be clearly mentioned in the offer or else confirmation that Erection / commissioning shall be done at free of cost is available in the offer.

33. Price shall be quoted item wise.

34. Any warranty replacement during warranty period shall be supplied free of charge on FOR BHEL, **THIRUMAYAM/PUDUKKOTTAI Distt-622507** basis

35. 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.

36. Part Shipment or Transshipment is not permissible.(For import supplies)

37. In case of any short shipment in the main equipment / spares, where separate rates are not available in the contract, the customs duty levied on such supplies, shall be borne by the supplier / Indian agent.(For import supplies)
38. Indicate Nearest airport & sea port, Country of Origin .(For import supplies)
39. Vendors Meeting Our Pre-Qualification Criteria & Technical Specification Will Be Essential For Consideration Of Offer.
40. For The Vendor Willing To Participate In Tender Opening, The Representative Should Have Valid Company ID Proof & Authorization Letter From The Concerned Firm Who Has Submitted The Offer.
41. After Technical Scrutination Of The Offers, Price Bid Of Only Technically Qualified Vendors Will Be Opened With Prior Intimation.
42. If The Due Date Of Tender Opening Happens to be a Holiday, Those Tenders Will Be Opened On Next Working Days
43. For any clarification you can contact to pgavictor@bheltry.co.in, surajkumar@bheltry.co.in
44. This Tender Is Hosted Both In Bhel Website And In NIC, PSU Portal And Any Corrigendum May Pl Be Viewed in BHEL's website <http://www.bhel.com> (Tender Notification page)
Govt. Tender website <http://tenders.gov.in> (Public sector units > Bharat Heavy Electricals Limited Page)
45. If we receive offer from both Manufacturer and their Agent / Dealer or any other, the offer of Manufacturer only will be considered

General Note For The Enq On Reverse Auction (RA) conductance :

1. BHEL reserves the right to go for Reverse Auction (RA) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. All bidders to give their acceptance for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA
In case BHEL decides to go for Reverse auction ,only those bidders who have given their acceptance to participate in RA will be allowed to participate in RA . Those bidders who have given their acceptance to participate in RA will have to necessarily submit online sealed bid in the RA .Non submission of "online sealed bid" by the bidder will be considered as tampering of tender process & will invite action by BHEL as per extant guidelines in vogue.
Information And General Terms And Conditions Covering RA Are Given In **Annexure-I**
2. Reverse Auction Is Done Through On Line Internet Through A Service Provider Appointed By BHEL. Hence Vendors Shall Make Themselves Equipped With Email, Fax And Internet Facility Etc.
3. In Case Of Going For Reverse Auction Vendors Will Be Suitably Informed About The Working Procedures Of Reverse Auction Process And Bhel Will Provide All The Relevant Details To Enable The Vendor To Participate. Service Provider Will Also Give Demo- Training.
4. The RA Will Be Done On Individual Itemwise L1 Basis, Not On The Whole Package L1 Basis

Annexure-V

Certificate by Chartered Accountant on letter head

This is to Certify that M/S
(hereinafter referred to as 'company') having its registered office at
..... is registered under MSMED Act 2006, (Entrepreneur
Memorandum No (Part—II) dtd.....
Category:(Micro/Small)). (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as per the
latest audited financial year as per MSMED Act 2006 is as follows:

- 1. For Manufacturing Enterprises:** Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No,S.O.1722(E) dated October 5, 2006 :
Rs.....Lacs
- 2. For Service Enterprises:** Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006:
Rs...Lacs

(Strike off whichever is not applicable)

The above investment of RsLacs is within permissible limit of
Rs.Lacs forMicro / Small **(Strike off which is not applicable)**
Category under MSMED Act 2006.

Or

The company has been graduated from its original category (Micro/ Small) **(Strike off which is not applicable)** and the date of graduation of such enterprise from its original category is
(dd/mm/yyyy) which is within the period of 3 years from the date of graduation of such enterprise from its original category as notified vide S.O. No. 3322(E) dated 01.11.2013 published in the gazette notification dated 04.11.2013 by Ministry of MSME.

Date:

(Signature)

Name -

Membership number –

Seal of chartered accountant

ANNEXURE –A (CHECK LIST FOR TECHNICAL & COMMERCIAL TERMS CONFIRMATIONS)**(a).TECHNICAL TERMS CONFIRMATION: AGAINST ALL ENQ SL NOS. (SUBMITTED IN COVER NO: 1)**

ENQ NO	SL	BHEL SPECIFICATIONS	YOUR SPECIFICATION	unit	Quantity	Consignment weight against each item separately	whether quoted/ not quoted
10							
20							
30							

(b).COMMERCIAL TERMS CONFIRMATION REQUIRED FROM SUPPLIERS (SUBMITTED IN COVER NO: 1)

SL NO	DESCRIPTION	BHEL REQUIREMENTS	SUPPLIER CONFIRMATION
1	VALIDITY	MINIMUM 90 Days from Date of tender opening	
2	PRICE QUOTED	FOR BHEL THIRUMAYAM INCLUSIVE OF PACKING & FORWARDING CHARGES.	
3	EXCISE DUTY WITH CESS (Whether inclusive (or) extra) Clearly mention the percentage	SUPPLIER TO QUOTE	
4	VAT % Clearly mention the percentage	SUPPLIER TO QUOTE	
5	CST % with& without c form Clearly mention the percentage	SUPPLIER TO QUOTE	
6	FREIGHT & INSURANCE CHARGES FOR DELIVERY AT BHEL / THIRUMAYAM STORES/PUDUKKOTTAI Distt-622507	SUPPLIER TO QUOTE IN % ONLY	
7	DEIVERY SCHEDULE FROM THE DATE OF PURCHASE ORDER / LETTER OF INTENT	SUPPLIER TO QUOTE IN NO. OF DAYS/ WEEKS	
8	PAYMENT TERMS	As per Clause 11 of Terms and Conditions of the Enquiry (Two Part Bid)	
9	LIQUIDATED DAMAGES CLAUSE	As per Clause 12 of Terms and Conditions of the Enquiry (Two Part Bid)	
10	RISK PURCHASE CLAUSE	As per Clause 23 of Terms and Conditions of the Enquiry (Two Part Bid)	
11	GUARANTEE / WARRANTY	AS PER TENDER CONDITION	
12	ERECTION / COMMISSIONING	AS PER TENDER CONDITION	
13.	Origin of dispatch	SUPPLIER TO QUOTE	
14.	Nearest airport & sea port (For import supplies)	SUPPLIER TO QUOTE	
15.	Country of Origin (For import supplies)	SUPPLIER TO QUOTE	
16	CONTACT PERSON DETAILS	NAME:	
		MOBILE NO:	
		LAND LINE NO:	
		EMAIL :	
		FAX:	

NOTE: a). -It is confirmed that all the terms and conditions stipulated in the Enquiry have been fully understood by us and all clarifications & details have been obtained.

b)Your specific acceptance to our Payment terms,LD & Risk Purchase Clause are essential for consideration of your offer.

c).No row shall be left blank. Please indicate NA, in case the item is “not applicable”

Full postal Address:

Signature & Office Seal of the vendor

ANNEXURE –B (MODEL PRICE BID FORMAT)

EN Q SL NO	BHEL SPECIFICATIONS	YOUR SPECIFICATION	unit	quantity	Rate in Rs.	Value in Rs.
10						
20						
30						

PRICE BID FORMAT OF ALL QUOTED ITEMS, IF ANY ITEM YOUR ARE NOT QUOTED SIMPLY YOU SHOULD MENTION AS “NOT QUOTED” AGAINST THAT ENQ SL NO. (SUBMITTED IN SEPARATE COVER NO: 2)

Annexure-VI

CHECK LIST TO BE SUBMITTED ALONG WITH OFFER

SL NO	Documents submitted	Vendor's Confirmation Yes/No
01.	Offer Submitted in 2 part bid system i.e. (I).Techno-Commercial Bid & (II).Price Bid inside a separate larger sealed envelope and this envelope shall be super scribed as "Techno-Commercial Bid and Price Bid" for Enquiry No:Dt.:Due Dt.:	
02.	Annexure-A part-(a).TECHNICAL TERMS CONFIRMATION & part (b).COMMERCIAL TERMS CONFIRMATION to be SUBMITTED ALONGWITH IN COVER NO: 1	
03.	Annexure-B- Price Bid to be SUBMITTED IN SEPARATE COVER NO: 2	
04.	Pre-Qualification Criteria fulfilled& documents Submitted	
05.	Documents/technical catalogues /DRAWINGS, (wherever as applicable) submitted as per tender condition	
06.	point to point confirmation provided as per tender condition	
07	In case of RA conductance ,Details submitted as per RA checklist	