



# BHARAT HEAVY ELECTRICALS LIMITED

( 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 : 23505	Enquiry No	Enquiry Date	Due Date for Quotation
Vendor Name : Open Tender Dummy Code Australia	2681400036	16.12.2014	14.01.2015
Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order. <u>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 the covers must be placed in a Third Cover and Sealed. Our Enquiry No., Eng. date &amp; Eng. Due date must be written on all Three covers.</u>			

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	Supply and Installation of Remote Operated Valves for LPG lines in Unit-II (RC Project) as per Qualifying Criteria - PART-A & Scope of Work/Supply - PART-B	NO	1.000	1.00	31.03.15

### General Note:

1. Please submit your detailed offer in two part bid system i.e Part-I. Technical bid+ Checklist (Annexure-A) + unpriced bid with indicating taxes & duties (Annexure-B) in a sealed cover super scribing on the cover as "TECHNICAL & COMMERCIAL BID / PART-II"  
Part-II. Priced offer in another separate sealed cover super scribing on the cover as Part-II

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-A. 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 120 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.

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-A/Point no.16)

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

  
MANAGER / PURCHASE  
(FOSSIL BOILERS)  
Yours faithfully,  
BHEL, TRICHY - 620 014



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Page  
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2681400036 / 16.12.2014

23505

7. 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.

8. Vendors are requested to avoid the following points while submitting the Bid Documents:

- Loose or spiral bound bid documents are not encouraged.
- In case of any corrections/overwriting in the tender documents, the same shall be duly attested by the bid submitter.

9. Vendors representative having proper ID proof and authorization letter shall attend the tender opening.

List of Attachments:

- Qualifying Criteria Part-A, 1 page
- Technical Specification Part-B, 11 pages
- Commercial Terms and Conditions - Annexure-A
- Price Format-Annexure-B
- CA Certificate for MSE Vendors-Annexure-III

**Enclosures:**

"LD clause has to be confirmed without fail."

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

MANAGER / PURCHASE  
(FOSSIL BOILERS)  
Yours faithfully,  
Purchase / MFG / MFG  
BHEL, TRICHY - 620 014

**PART-A PRE-QUALIFICATION CRITERIA**

**Remote Operated Valves for LPG lines in Unit-II**

<b>Sl.No.</b>	<b>Description of BHEL Requirement</b>	<b>Specified/ To be confirmed by vendor</b>
1.1	Only those vendor who have supplied similar or equivalent systems/packages/components shall quote. Detailed product catalogue/technical write-up to be furnished each assembly/component.	Vendor to confirm
1.2	Only those vendors who have assessed the site requirement before quoting shall be evaluated further, complying to specification Sl. No. 11.7	Vendor to confirm
1.3	Vendor should provide detailed company profile, years of experience in the field	Vendor to confirm
1.4	Offers of only those Bidders who meet the above Qualifying Criteria will be considered for further evaluation.	Bidder to confirm

**PART-B SCOPE OF WORK/SUPPLY**

Sl.No.	Description of BHEL Requirement	Specified/ To be confirmed by vendor	Offered	Deviations
1	Design, Manufacture, Supply, Installation and Commissioning of Remote Operated Valves for LPG lines in Unit-II as per Specification given below:	Vendor to confirm		
2	<p><b>SCOPE OF VENDOR:</b></p> <p>1) Supply and installation of 5 Nos. of 4" Electrical Actuated Valve in Overhead LPG Pipe as indicated in the attached layout drawing.</p> <p>2) Supply and installation of 3 Nos. 2" Electrical Actuated Valve in Overhead LPG Pipe as indicated in the attached layout drawing.</p> <p>3) Supply and installation of 10 Nos. 4" Isolation Ball Valves for all electrical actuated valves.</p> <p>4) Supply and installation of 6 Nos. 2" Isolation Ball Valves for all electrical actuated valves.</p> <p>5) Supply of all necessary flanges, fittings (elbows, Tees &amp; etc), fastners, communication and power cables to actuators etc.</p> <p>6) Laying of required isolation pipe line for installing ROV's</p> <p>7) Supply of 10 Nos. Local Control Panels/Stations for actuation of individual ROVs.</p> <p>8) Commissioning of installed ROVs.</p> <p>9) Supply of spares for ROV's &amp; isolation valve as per Sl. No. 11</p>	Vendor to confirm		
3	<p><b>APPLICATION:</b></p> <p>Engagement of any emergency switch/open-close button on the actuator or local control panel (located approx. 10 meters below the valve) should actuate (close) respective valves. Status of open-close condition, health status of the valve should be clearly visible on the actuator/local control station/panel.</p> <p><b>Location: Unit II, BHEL, Trichy</b></p>	Vendor to confirm		

**PART-B SCOPE OF WORK/SUPPLY**

Sl.No.	Description of BHEL Requirement	Specified/ To be confirmed by vendor	Offered	Deviations
4	<b>4" Ball Valve with electrical actuator</b>			
	<b>Valve Details:</b>			
4.1	Type of valve	On-Off Type & Flame proof		
4.2	Design Standard	API 6D / ISO 14313/ Equivalent - Vendor to specify		
4.3	Manufacturing standard	Vendor specify		
4.4	Working Medium :	LPG		
4.5	Pressure Rating :	300 Class		
4.6	Working Pressure :	2 Kgf/cm2 Max		
4.7	Temperature	As per applicable standards - Vendor to specify		
4.8	End connection :	Raised Face Flanged Ends of 300 Class as per ANSI B16.5		
4.9	Material Construction	Body : ASTM A216 Gr.WCB Ball: ASTM A351 Gr.CF8 Stem: SS304		
4.10	Material of Seats and Seal	PTFE		
4.11	Total Weight (Valve with Actuator)	Vendor to specify		
4.12	Make	Valve Make should be of Kromschroder\ Eclipse\ Flowjet\ Hawa\ Microfinish\ BDK\ Fisher Xomox\ Dembla\ Dungs or any other reputed make acceptable to BHEL		
	<b>Actuator Details:</b>			
4.13	Electrical Characteristics	ON-OFF type		
4.14	Travel	90 degrees / Quarter-Turn		
4.15	Indicator	Valve open/close position, alarm and health status to be clearly visible on the actuator or local control panel		
4.16	Power	BHEL will provide 1-phase 230 V AC, 50 Hz supply at a nearby location beneath the valve. Power supply to the actuator (approx. 10 meters) & local control panel under the scope of the vendor.		
4.17	Open-Close time	Vendor to specify		
4.18	Motor insulation	Class F		
4.19	Motor mounting on valve	Direct mounting (preferred)		

**PART-B SCOPE OF WORK/SUPPLY**

Sl.No.	Description of BHEL Requirement	Specified/ To be confirmed by vendor	Offered	Deviations
4.20	Body material	Vendor to specify		
4.21	Protection class	IP-67 weather proof, Hazardous area application (ATEX or equivalent)		
4.22	Normal position	Normally Open		
4.23	Manual override	Direct drive handwheel with mode select switch facility to be provided in case of power failure		
4.24	Approvals	DESIGN (TUV) / ISO 9001:2008 / CE / IEC or equivalent - vendor to specify.		
4.25	Make	Actuator Make should be of Rotork\ Kromschroder\ Hawa\ Weir-BDK\ Rotex\ Cair or any other reputed make acceptable to BHEL		
4.26	Duty Rating	Vendor to specify		
4.27	Operating Temperature	As per applicable standards - Vendor to specify		
4.28	Local Control Station/Panel	<p>A dedicated tapping point/junction for open-close actuation remotely from a push button/ open-close switch positioned below the actuator on the local control panel apart from the on-board actuation facility (if any). The panel should be flameproof design.</p> <p><b>a).</b> Indications as per clause 4.15 to be provided on the panel.</p> <p><b>b).</b> Panel should additionally have the remote communication facility as per clause 4.29.</p> <p><b>c).</b> Facility for local or remote operation (bypass) to be provided in-built. In case of field activation of actuators, facility for relaying the status to remote monitor should be provided.</p>		

**PART-B SCOPE OF WORK/SUPPLY**

Sl.No.	Description of BHEL Requirement	Specified/ To be confirmed by vendor	Offered	Deviations
4.29	Remote Communication Facility	<p>For integration of the actuators into a centralized monitoring and control system in future, the offered actuator/local control panel should have facility for relaying open-close, health status indication and remote actuation status to remote monitoring station via wireless communication protocol/module integrated into the local control panel with the following specifications:</p> <p><b>a).</b> Communication should be based on approved license-free frequency bands. Vendor to specify frequency used.</p> <p><b>b).</b> Communication standard should be 802.11 b/g or equivalent. Vendor to specify with technical details in case of different standard. (No GSM communication is to be offered).</p> <p><b>c).</b> Distance of coverage and type of operation (LOS/NLOS) for communication to be mentioned. At any point of time, it is to be ensured that no communication failure occurs. Required compensation/facilities/topologies to be ensured/provided to suit BHEL site requirements.</p> <p><b>d).</b> CMRI or equivalent certified hazardous proof transmitters/receivers/antennas/enclosure to be used. Certification proof to be submitted along with tender.</p> <p><b>e).</b> Communication should be trouble-free, noise-free, interference-free and with minimal components for ease of operation and maintenance.</p> <p><b>f).</b> Hardware/software modifications required for future integration into the remote monitoring system to be provided by the vendor.</p> <p><b>g).</b> Offered technologies / protocols/ licenses/ softwares should have minimum 2 years validity.</p>		
4.30	Quantity	6 Nos.		

**PART-B SCOPE OF WORK/SUPPLY**

Sl.No.	Description of BHEL Requirement	Specified/ To be confirmed by vendor	Offered	Deviations
5	<b>2" Ball Valve with electrical actuator</b>			
	<b>Valve Details:</b>			
5.1	Type of valve	On-Off Type & Flame proof		
5.2	Design Standard	API 6D / ISO 14313/ Equivalent -Vendor to specify		
5.3	Manufacturing standard	Vendor specify		
5.4	Working Medium :	LPG		
5.5	Pressure Rating :	300 Class		
5.6	Working Pressure :	2 Kgf/cm2 Max		
5.7	Temperature	As per applicable standards - Vendor to specify		
5.8	End connection :	Raised Face Flanged Ends of 300 Class as per ANSI B16.5		
5.9	Material Construction	Body : ASTM A216 Gr.WCB Ball: ASTM A351 Gr.CF8 Stem: SS304		
5.10	Material of Seats and Seal	PTFE		
5.11	Total Weight (Valve with Actuator)	Vendor to specify		
5.12	Make	Valve Make should be of Kromschroder\ Eclipse\ Flowjet\ Hawa\ Microfinish\ BDK\ Fisher Xomox\ Dembla\ Dungs or any other reputed make acceptable to BHEL		
	<b>Actuator Details:</b>			
5.13	Electrical Characteristics	ON-OFF type		
5.14	Travel	90 degrees / Quarter-Turn		
5.15	Indicator	Valve open/close position, alarm and health status to be clearly visible on the actuator or local control panel		
5.16	Power	BHEL will provide 1-phase 230 V AC, 50 Hz supply at a nearby location beneath the valve. Power supply to the actuator (approx. 10 meters) & local control panel under the scope of the vendor.		
5.17	Open-Close time	Vendor to specify		
5.18	Motor insulation	Class F		
5.19	Motor mounting on valve	Direct mounting (preferred)		
5.20	Body material	Vendor to specify		

**PART-B SCOPE OF WORK/SUPPLY**

Sl.No.	Description of BHEL Requirement	Specified/ To be confirmed by vendor	Offered	Deviations
5.21	Protection class	IP-67 weather proof, Hazardous area application (ATEX or equivalent)		
5.22	Normal position	Normally Open		
5.23	Manual override	Direct drive handwheel with mode select switch facility to be provided in case of power failure		
5.24	Approvals	DESIGN (TUV) / ISO 9001:2008 / CE / IEC or equivalent - vendor to specify.		
5.25	Make	Actuator Make should be of Rotork\ Kromschroder\ Hawa\ Weir-BDK\ Rotex\ Cair or any other reputed make acceptable to BHEL		
5.26	Duty Rating	Vendor to specify		
5.27	Operating Temperature	As per applicable standards - Vendor to specify		
5.28	Local Control Station/Panel	<p>A dedicated tapping point/junction for open-close actuation remotely from a push button/open-close switch positioned below the actuator on the local control panel apart from the on-board actuation facility (if any). The panel should be flameproof design.</p> <p><b>a).</b> Indications as per clause 4.15 to be provided on the panel.</p> <p><b>b).</b> Panel should additionally have the remote communication facility as per clause 4.29.</p> <p><b>c).</b> Facility for local or remote operation (bypass) to be provided in-built. In case of field activation of actuators, facility for relaying the status to remote monitor should be provided.</p>		

**PART-B SCOPE OF WORK/SUPPLY**

Sl.No.	Description of BHEL Requirement	Specified/ To be confirmed by vendor	Offered	Deviations
5.29	Remote Communication Facility	<p>For integration of the actuators into a centralized monitoring and control system in future, the offered actuator/local control panel should have facility for relaying open-close, health status indication and remote actuation status to remote monitoring station via wireless communication protocol/module integrated into the local control panel with the following specifications:</p> <p><b>a).</b> Communication should be based on approved license-free frequency bands. Vendor to specify frequency used.</p> <p><b>b).</b> Communication standard should be 802.11 b/g or equivalent. Vendor to specify with technical details in case of different standard. (No GSM communication is to be offered).</p> <p><b>c).</b> Distance of coverage and type of operation (LOS/NLOS) for communication to be mentioned. At any point of time, it is to be ensured that no communication failure occurs. Required compensation/facilities/topologies to be ensured/provided to suit BHEL site requirements.</p> <p><b>d).</b> CMRI or equivalent certified hazardous proof transmitters/receivers/antennas/enclosure to be used. Certification proof to be submitted along with tender.</p> <p><b>e).</b> Communication should be trouble-free, noise-free, interference-free and with minimal components for ease of operation and maintenance.</p> <p><b>f).</b> Hardware/software modifications required for future integration into the remote monitoring system to be provided by the vendor.</p> <p><b>g).</b> Offered technologies / protocols/ licenses/ softwares should have minimum 2 years validity.</p>		
5.30	Quantity	4 Nos.		

**PART-B SCOPE OF WORK/SUPPLY**

Sl.No.	Description of BHEL Requirement	Specified/ To be confirmed by vendor	Offered	Deviations
<b>6</b>	<b>4 " 300 CLASS ISOLATION BALL VALVE</b>			
6.1	Design Standard	API 6D / ISO 14313/ Equivalent - Vendor to specify		
6.2	Manufacturing standard	Vendor to specify		
6.3	Operation	Hand lever operated		
6.3	Working Medium	LPG		
6.4	Pressure Rating :	300 Class		
6.5	Working Pressure	2 Kgf/cm2 Max		
6.6	End connection :	Raised Face Flanged Ends of 300 Class as per ANSI B16.5		
6.7	Material Construction	Body : ASTM A216 Gr.WCB Ball: ASTM A351 Gr.CF8 Stem: SS304		
6.8	Material of Seats and Seal should be of PTFE	Vendor to confirm		
6.9	Valve should be flame proof	Vendor to confirm		
6.10	Make	Valve Make should be of Rotork\ Kromschroder\ Eclipse\ Flowjet\ Hawa\ Microfinish\ BDK\ Fisher Xomox\ Dembla\ Rotex\ Dungs or any other reputed make acceptable to BHEL		
6.11	Quantity	12 Nos.		
<b>7</b>	<b>2 " 300 CLASS ISOLATION BALL VALVE</b>			
7.1	Design Standard	API 6D/ ISO 14313/ Equivalent - Vendor to specify		
7.2	Manufacturing standard	Vendor to specify		
7.3	Operation	Hand lever operated		
7.4	Working Medium	LPG		
7.5	Pressure Rating :	300 Class		
7.6	Working Pressure	2 Kgf/cm2 Max		
7.7	End connection :	Raised Face Flanged Ends of 300 Class as per ANSI B16.5		
7.8	Material Construction	Body : ASTM A216 Gr.WCB Ball: ASTM A351 Gr.CF8 Stem: SS304		
7.9	Material of Seats and Seal should be of PTFE	Vendor to confirm		
7.10	Valve should be flame proof	Vendor to confirm		

**PART-B SCOPE OF WORK/SUPPLY**

Sl.No.	Description of BHEL Requirement	Specified/ To be confirmed by vendor	Offered	Deviations
7.11	Make	Valve Make should be of Rotork\ Kromschroder\ Eclipse\ Flowjet\ Hawa\ Microfinish\ BDK\ Fisher Xomox\ Dembla\ Rotex\ Dungs or any other reputed make acceptable to BHEL		
7.12	Quantity	8 Nos.		
<b>8</b>	<b>SAFETY SYSTEMS</b>			
8.1	The various safety interlocks offered with the entire system to be mentioned in detail.	Vendor to provide details		
<b>9</b>	<b>ERECTION AND COMMISSIONING</b>			
9.1	<p><b>Vendor's scope of work:</b></p> <p><b>Mechanical:</b></p> <p>1) Installation and mounting of 5 No's of 4" Electrical actuated valves with required isolation valves (2 No's of isolation valve for 1 electrical actuated valve) at elevation of 10 m approx at various locations in Unit II, BHEL</p> <p>2) Installation and mounting of 3 No's of 2" Electrical actuated valves with required isolation valves (2 No's of isolation valve for 1 electrical actuated valve) at elevation of 10 m approx near the LPG furnaces in Unit II, BHEL</p> <p>3) Laying of required 4" isolation pipelines in the existing pipe line with all necessary supports, flanges, pipe fittings , fastners, Painting and etc. Approximate isolation pipe line length to be laid for intalling one ROV will be 5 metres. Totally 25 metres for 5 No's of ROV installed at different locations</p> <p>4) Laying of required 2" isolation pipelines in the existing pipe line with all necessary supports, flanges, pipe fittings , fastners, Painting and etc. Approximate isolation pipe line length to be laid for intalling one ROV will be 5 metres. Totally 15 metres for 3 No's of ROV installed near LPG furnaces in Unit II, BHEL</p> <p>5) All root welding in the LPG line should be of TIG root welding followed by SMAW. Only qualified welder should be deployed</p> <p>6) Leak test to be performed for the isolation line and if any leakage found, it has be rectified.</p> <p><b>Electrical:</b></p> <p>1) Laying of power supply cables along with termination and provision switchboard from the nearest location, power supply to actuator.</p> <p>2) Commissioning of all ROVs</p>	Vendor to confirm		

**PART-B SCOPE OF WORK/SUPPLY**

Sl.No.	Description of BHEL Requirement	Specified/ To be confirmed by vendor	Offered	Deviations
9.2	Mobile crane facility and vehicle required for the movement of material and the execution of the work will be provided by BHEL			
9.3	All tools and tackles required for mechanical erection work including Three phase welding machine with electrode holder, cutting torch , cable, oxy-acetylene regulators with rubber hoses, paint brushes, ladders and lifting tackles necessary for the execution of the work will provided by BHEL.	Vendor to confirm		
9.4	BHEL will supply all the Pipe Materials, Plate materials & support angles required for the Laying isolation pipe line.	Vendor to confirm		
9.5	BHEL will supply the required consumables susch as welding electrodes, Oxygen Gas (O2 Cylinders), Acetylene Gas (Acetylene Cylinders) for fabrication of the pipe line.	Vendor to confirm		
9.6	BHEL will supply Electric Power and Water at free of cost.	Vendor to confirm		
9.7	BHEL will supply required red oxides, paints, thinner & emery sheets for painting the pipe line.	Vendor to confirm		
9.8	BHEL will Provide of 1-phase, 230 VAC, 50 Hz power supply at nearby location (man-height) to all ROVs	Vendor to confirm		
<b>10</b>	<b>VENDOR'S SCOPE OF SUPPLY</b>			
10.1	4" Electrically Actuated Flameproof Valve as per given specification clause 4.0	5 Nos + 1 No spare (Total : 6 No's)		
10.2	2" Electrically Actuated Flameproof Valve as per given specification clause 5.0	3 Nos + 1 No spare (Total : 4 No's)		
10.3	4" 300 Class isolation Ball Valve as per given specification clause 6.0	10 Nos + 2 No's spare (Total : 12 No's)		
10.4	2" 300 Class Isolation Ball Valve as per given specification clause 7.0	6 Nos + 2 No's spare (Total : 8 No's)		
10.5	All required size pipe line flanges, pipe fittings (elbows, Tees and etc)& fastners to suit BHEL provided Pipe material	Vendor to confirm		
10.6	All required tools and tackles including line tester, digital meters, soldering iron, crimping tool, and etc for carrying out electrical erection and commissioning will be under the scope of the vendor.	Vendor to confirm		
10.7	Complete Commissioning of the system (Including Mechanical & Electrical) will be under the scope of vendor. Supervision will be by BHEL.	Vendor to confirm		
10.8	Required communication and power cables from local station (approx. 10 meters beneath each valve) and power point to actuators.	10 meters/actuator		

**PART-B SCOPE OF WORK/SUPPLY**

<b>Sl.No.</b>	<b>Description of BHEL Requirement</b>	<b>Specified/ To be confirmed by vendor</b>	<b>Offered</b>	<b>Deviations</b>
<b>11</b>	<b>GENERAL POINTS</b>			
11.1	All technical specifications, drawings and product catalogue to be submitted with offer, else offer will not be considered.	Vendor to provide		
11.2	Drawing approval (P&I, Electrical Wiring Diagram) is to obtained from BHEL before manufacturing and supply.	Vendor to confirm		
11.3	The components should be offered for inspection to BHEL prior to despatch.	Vendor to confirm		
11.4	All equipments supplied should have a warranty of 12 months from the date of commissioning	Vendor to confirm		
11.5	All the components should have technical details marked in a name plate.	Vendor to confirm		
11.6	For all the components supplied and for the full system, user manual (including detailed internal wiring diagrams of the actuators) is to be provided (one softcopy + three hard copies).	Vendor to confirm		
11.7	Vendor should compulsorily visit BHEL-Trichy to assess the site requirement before quoting for the tender requirement. Otherwise offer will not be considered.	Vendor to confirm		
11.8	All components, including the actuator should have spares and service support for atleast 10 years	Vendor to confirm		
<b>12</b>	<b>PROVE-OUT</b>			
12.1	Vendor should commission and prove successful operation of all individual ROVs from their respective local control panels.	Vendor to confirm		
12.2	Vendor should test and demonstrate the actuation of all ROVs from a remote location using wireless communication at BHEL works. Required equipment/ components for prove-out to be brought by the vendor.	Vendor to confirm		

# SYSTEM BENDER BLOCK

276X30M

276X30M

# BLDG - 123

DISPOSAL STORE  
50X30M

COMMON STORE  
SHED (12MX90M)

WARD 30 TUBE & PIPE STORE 250X32M WARD 31

TUBE STORE WARD 30 250X32M

BAY-A TUBE PREPARATION 240X30M

BAY-A BURNER PANEL SHOP 210X30M

□ 2" ROV LOCATION

● 4" ROV LOCATION

# BLDG - 107

# BLDG - 108

- BAY-5 COIL SHOP 246X30M
- BAY-4 COIL SHOP 246X30M
- BAY-3 COIL SHOP 246X30M
- BAY-2 PANEL SHOP 246X30M
- BAY-1 PANEL SHOP 246X30M

- BAY-1 FUEL LINES & PIPE SHOP 246X30M
- BAY-2 PIPE SHOP 246X30M
- BAY-3 PIPE SHOP 246X30M
- BAY-4 HEADER SHOP 246X30M
- BAY-5 PIPE SHOP 246X30M

BAY-B SHIPPING 240X30M

BAY-B SHIPPING 180X30M

TO MHD

**BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI**  
**CAPITAL PURCHASE**

Annexure-A

**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 <b>TWO INNER ENVELOPES</b> as indicated below which shall be sealed in one outer envelope.</p> <ul style="list-style-type: none"> <li>❖ <b>Envelope I:</b> This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked "<b>Part I - Technical and commercial bid</b>", indicating Enquiry No., Due Date and Address &amp; Reference of the Bidder.</li> <li>❖ <b>Envelope II:</b> This sealed envelope should contain <b>price details</b>. This envelope should be clearly marked "<b>Part II - Price bid</b>", indicating Enquiry No., Due Date and Address &amp; 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.</li> </ul> <p>All the two envelopes (Part I&amp;II) shall be put in one cover, duly sealed, super scribing as "<b>Part I and Part II of Enquiry No., due date of opening</b>" and the address and reference of the Bidder. The offer received without the above guidelines, will not be considered for opening.</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. Tender should not be addressed to any Individual's name but only by designation to:</p> <p align="center"><b>DGM / CAPITAL PURCHASE / MFG  24 BUILDING, 4TH FLOOR  BHARAT HEAVY ELECTRICALS LIMITED  HIGH PRESSURE BOILER PLANT  TIRUCHIRAPALLI - 620 014  TAMIL NADU, INDIA</b></p> <p>Tenders should be free from <b>CORRECTIONS AND ERASURES</b>. 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 <b>ENGLISH</b> and accompanied by detailed technical literature, catalogue and detailed dimensional drawings in <b>ENGLISH</b> or otherwise, the offers will not be considered.</p>
2.	<p><b><u>OPENING OF TENDERS</u></b></p> <p>The Part I- Technical &amp; 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. Hence the Bidders are required to submit their best competitive price in the price bid in a sealed cover (Part-II). In case of necessity 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.16).</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><b><u>TAXES AND DUTIES :</u></b></p> <p>All Taxes and Duties payable as extra to the quoted price should be specifically stated in offers along with CST &amp; 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 &amp; BHEL ECC No. AAACB4146PXM012, Service Tax Reg No (STC)- AAACB4146PST006. Assessment circle Tiruverambur.</p> <p><b>Cenvat credit &amp; VAT credit</b> (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 <b>CENVAT</b> credit for his input materials, the effect of proforma credit should be passed on to the purchaser</p> <p><b>Income Tax applicable</b>  Any service charges payable towards supervision of E&amp;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&amp;C charges will be payable extra. The liability of depositing the same to the Govt. will be of the supplier</p>

<b>No row shall be left blank. Please indicate NA, in case the item is “not applicable”</b>		<b>Vendor's confirmation</b>
	<b>Validity:</b> Validity of the offer should be <b>120 days</b> from the date of tender opening.	
<b>4.</b>	<p><b>Release of Purchase Order:</b></p> <ul style="list-style-type: none"> <li>➤ Purchase Orders (separate for supply and I&amp;C portion if applicable) will be released on the successful vendor (L1 vendor)</li> <li>➤ Order shall be placed on single vendor on cumulative L1 basis.</li> <li>➤ This tender is composite in nature and cannot be split-up to more than one vendor. Hence the entire work will be awarded to only lowest bidder of the tender. Work cannot be split-up and given to MSE vendor if they are L2 or above ranking in the tender.</li> </ul>	
<b>5.</b>	<p><b>Payment terms for Supply Portion</b> 80% Payment after receipt and acceptance of material and balance 20% within 45-90 days after receipt, acceptance and commissioning of supply material against submission of 10%PBG for order value.</p> <p><b>Installation &amp; Commissioning Portion (if applicable only):</b> 100% of the Erection / commissioning charges (in case contract involves erection /commissioning) shall be paid only on completion of such erection / commissioning at BHEL</p> <p style="color: red;">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.</p>	
<b>6.</b>	<p><b>Performance Bank Guarantee (PBG):</b> 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 <b>10% (Ten percent)</b> of the value of the contract. The PBG shall be valid for a period of 18 months from the date of dispatch or <b>12 months</b> 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><b>LIST OF CONSORTIUM BANKS</b> 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><b>LIST OF NATIONALISED BANKS</b> 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 &amp; SIND BANK 16.STATE BANK OF INDIA 17.STATE BANK OF TRAVANCORE 18.STATE BANK OF MYSORE 19.STATE BANK OF BIKANER &amp; 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>	
<b>7.</b>	<p><b>Liquidated damages (LD):</b> The delivery of the goods specified in the purchase order should be made within the time prescribed. LD for delay in ‘Supply’ and/or ‘I&amp;C’ will be applicable to the delays attributed to vendor. LD will be considered separately for ‘Delivery’ and ‘I &amp;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.</p> <p>The rate of LD for delayed E&amp;C shall be @ 0.5% per week of delay of total PO value (Supply + I &amp;C) in I &amp;C subject to a maximum of 10% of total PO value (Supply + I&amp;C).</p> <p>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.</p> <p>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).</p>	
<b>8.</b>	<p><b>Risk Purchase:</b> 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>	
<b>9.</b>	<p><b>Delivery terms and evaluation process:</b> Indian Bidders should submit their offer on <b>FOR BHEL, Tiruchy</b> basis. Packing &amp; Forwarding and Freight &amp; Insurance charges from works to BHEL, Tiruchy to be indicated separately if extra from basic rate. Applicable % of ED &amp; Sales Tax , Commissioning Charges should be clearly indicated.</p> <p style="background-color: yellow;"><b>Evaluation of offers shall be on the basis of delivered cost (Net cash outflow to BHEL)</b></p>	

10.	<p><b>Guarantee:</b> 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. Also, a PBG has to be given which shall cover the guarantee period (with additional 2 months as claim period). Normally No deviation permitted and the deviated offers are liable for rejection.</p>	
11.	<p><b>Short shipment / Warranty replacement:</b> 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 warranty period shall be on FOR, BHEL, Tiruchirappalli, basis.</p>	
12.	<p><b>Inspection &amp; Testing:</b> 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>	
13.	<p><b>Test certificates / Operating and Maintenance manuals:</b> 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>	
14.	<p>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.</p>	
15.	<p><b>BHEL will consider the ranking after the loading is applied as referred above wherever deviations are observed.</b></p>	
16.	<p><b>Reverse Auction (RA):</b> BHEL reserves the right to conduct on-line internet Reverse Auction ie. ONLINE BIDDING (THROUGH A SERVICE PROVIDER) 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"> <li>For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.</li> <li>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.</li> <li>BHEL will inform the vendor in writing in case of reverse auction, the details of Service Provider to enable them to contact &amp; get trained.</li> <li>Business rules like event date, time, start price, bid decrement, extensions etc. also will be communicated through service provider for compliance.</li> <li>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.</li> <li>BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at "Total Cost to BHEL" like Packing &amp; forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms &amp; conditions) for each of the vendor to enable them to fill-in the price and keep it ready for keying in during the Auction</li> <li>Reverse auction will be conducted on scheduled date &amp; time.</li> <li>At the end of Reverse Auction event, the lowest bidder value will be known on the network.</li> <li>The lowest bidder has to Fax/e-mail 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.</li> <li>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.</li> <li>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.</li> <li>BHEL reserves the right to negotiate if need be, with the "L1" vendor of the Reverse Auction</li> <li><u>BHEL reserves the right not to consider offers from vendors not complying with the RA process for finalization of the enquiry.</u></li> <li>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.</li> </ol> <p>In case BHEL decides to go for reverse auction, the H1 bidder(s) (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process.</p>	
17.	<p><b><u>Special Provisions for Micro and Small Enterprises (MSE)</u></b></p> <p>MSE suppliers can avail the intended benefits only if they submit along with offer, attested copies of either EM II (Entrepreneur Memorandum Part 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 as per <b>Annexure - III</b>) applicable for the relevant financial year (latest audited), certifying quantum of investment in plant and machinery within the permissible limit as per the act for relevant status (Micro or small) where the deemed validity of EM II is over. Date to be reckoned for determining the deemed validity will be the last date of technical bid submission. Offer/s received without these documents will lead to consideration of their offer at par with other bidders and MSE status of such suppliers shall be shifted to Non MSE supplier.</p>	

<b>18.</b>	<ul style="list-style-type: none"> <li>➤ Point to point confirmation for the Technical Specification enclosed to be provided. If there are any deviations, the same should be clearly specified. Offers received without confirmation to our specifications will be liable for rejection. If needed additional sheets shall be used.</li> <li>➤ Equipment offered shall be "New". Re-built / Re-conditioned / Used equipment's will not be accepted. Incomplete offers will not be considered for further processing Fixed price:</li> <li>➤ 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.</li> <li>➤ 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.</li> <li>➤ All Equipment's / Services including concerned personnel for carrying out the erection and commissioning of the equipment shall be arranged by the vendor. If any Services are availed from BHEL, it is only on chargeable basis unless otherwise specified.</li> <li>➤ 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</li> <li>➤ The Supplier shall arrange for securely protecting and packing the stores to avoid loss or damages during transit.</li> </ul>	
<b>19.</b>	<b>Company Details &amp; Contact</b>	
	Full Address of the company for future correspondence. (Copy of address proof & PAN card shall be attached along with Part-I)	
	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	
<b>20.</b>	<b>TO BE CONFIRMED BY VENDOR</b>	
	Country of origin:	
	Station of dispatch/Port of Shipment	
	Delivery Terms (For destination or Ex-works )	
<b>21.</b>	<b>Packing &amp; Forwarding Charges, if any ( in % or Lumpsum) ie. extra from basic rate</b>	
	% of Excise Duty with cess	
	% of TAX (CST/VAT) (TNGST with FORM-17 or CST with C-FORM)	
	<b>(If applicable only)</b>	
	Installation & commissioning charge is inclusive (or) exclusive on basic rate	
	Service tax applicable extra or not	
	<b>Freight &amp; Transit Insurance</b> 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)	
<b>22.</b>	Delivery from the date of Letter of Intent / Purchase Order. <b>(This should be inclusive of Order acceptance, drawing approval and time period required for receiving goods at BHEL Trichy.etc.,</b>	
<b>23.</b>	<b>Weight &amp; Cubage of package:</b> 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 <pgavictor@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.

Name:

Signature with date:

(AFFIX OFFICIAL SEAL HERE)

Designation:

(PLEASE AFFIX YOUR SIGNATURE WITH SEAL ON EACH PAGE)

**MODEL PRICE BID FORMAT FOR INDIAN BIDDERS**

Enquiry No. &amp; Date:

Bidder's Offer No. &amp; 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)
	<b>Supply portion</b>							
	Service portion- if exclusive from basic price (available in scope only)							
	Packing & Forwarding charges (if any) in percentage (or) Lumpsum							
	FOR Dispatching station value in Rs.							
	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 & Insurane will be borne by BHEL)							
	Approximate Net weight of the total consignment							
	Approximate Gross weight of the total consignment							
	Approximate Dimensions of the Consignment							

Signature &amp; Seal of Vendor

**The 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"**

**Certificate by Chartered Accountant on letter head**

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

Further verified from the Books of Accounts that the investment of the company as on  
date..... as per MSMED Act 2006 is as follows:

1. **For Manufacturing Enterprises:** Investment in plant and machinery (i.e. original cost  
excluding land and building and the items specified by the Ministry of Small Scale Industries vide its  
notification No.S.O.1722(E) dated October 5, 2006 :  
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

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

Date:

(Signature)

Name -

Membership number -

Seal of Chartered Accountant