

**BHARAT HEAVY ELECTRICALS LIMITED**Page
14**ENQUIRY**
(IMPORTS)(A Government of India Undertaking)
HIGH PRESSURE BOILER PLANT
PURCHASE DEPARTMENT - Valves
THIRUCHIRAPALLI - 620014
TAMILNADU (INDIA)PHONE : 91-44-28158821
GRAMS : BHARATELEC
FAX NO: 910431/520730
E-mail :
Web :

OFFICE COPY	Collective No.	Enquiry Date	Due Date For Quotation
	2670700001	11.01.2007	14.02.2007
Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order			

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	DIGITAL FLAT PANEL DETECTOR FOR REAL TIME RADIOGRAPHY COMPATIBLE WITH 320 KV CONSTANT POTENTIAL X RAY SYSTEM AS PER SPECIFICATION ATTACHED. ALSO PART A QUALIFYING CRITERIA FOR THE SUPPLY OF DIGITAL FLAT PANEL FOR REAL TIME RADIOGRAPHY SYSTEM TO BE FULFILLED. DIGITAL FLAT PANEL DETECTOR	NO	1.000	1.00	30.06.07

General Note:

1. PLEASE SUBMIT YOUR DETAILED OFFER AS TWO PART BID SYSTEM I.E. TECHNICAL OFFER IN ONE SEALED COVER AND COMMERCIAL OFFER IN ANOTHER SEPARATE SEALED COVER.
2. POINT TO POINT CONFIRMATION OF ACCEPTANCE TO BHEL'S SPECIFICATION AND COMMERCIAL TERMS AND CONDITIONS SHOULD BE PROVIDED IN THE ENCLOSED SHEET.

Enclosures:

"LD clause has to be confirmed without fail."

The offers should reach us before the time of opening of tenders.
The offers will be opened at 14:30 hours on the due date in the presence of the tenderers who may like to be present.
Late tenders are liable to be rejected.

Yours faithfully,
For **BHARAT HEAVY ELECTRICALS LIMITED**
MANAGER / PURCHASE
(Valves)

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TECHNICAL SPECIFICATIONS for DIGITAL FLAT PANEL FOR REAL TIME RADIOSCOPY SYSTEM

Compatible with 320 kV X Ray constant potential system

S. No.	PARTICULARS	BHEL SPECIFICATIONS	Bidder's OFFER [With Complete Technical Details]
1.0	Area of Application	DIGITAL FLAT PANEL is an Imaging device for Real Time Radioscopy(RTR), used in conjunction with X RAY equipment and Automatic Defect Recognition (ADR) system for evaluation of Hancock valve welds of circumference ranging from 200 mm to 300 mm, with bore size 6 mm to 50 mm and Double wall thickness ranging from 32mm to 36 mm on line Inspection.	
2.0	Principle of Operation	The Digital Flat Panel Detector is an imaging device which replaces Photographic film / Image intensifier. During RTR,X rays are made to pass through the weld and the image of the weld is captured concurrently with x ray irradiation. The Flat Panel Detector converts X ray image into Visible Digital Image and displays On a computer monitor.	
3.0	Radioscopic Technique	Double wall double Image (elliptical image)	
4.0	Equipment Configuration	The minimum desired features are enlisted below	
4.1	Operating Parameters for Flat Panel	(a) Input X Ray Radiation 15 to 320 kV, @intensity 1-10mA (b) Mains supply 240V + / - 10V Frequency:50-60 Hz © Environmental condition: Temperature-Room Temperature(20-42 ° C,) Humidity:RH maximum 85%;	
4.2	Constructional Features	As follows	

4.2.1	Flat Panel Detector System	<p>The total system shall include:</p> <p>(1) Acquisition System including</p> <ul style="list-style-type: none"> (a) Detector Panel (b) Panel Controller (c) Panel Temperature Control (d) Real Time/ Near Real Time Image Display monitor and Real Time Near Real Time Image Controller (e) Acquisition Control Station (Computer, software and data interface cables) <p>(2) Image Review Station to Review images</p> <ul style="list-style-type: none"> (a) Computer with CD archival unit, monitor, keyboard and mouse (b) Image Review Software (c) Data and image storage and management system essential 	
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4.2.1.1	<p>Detector specification</p> <p>(1)(a) Detector Panel: <u>Scintillator material:</u> Amorphous Silicon with Preferably CsI Life and cooling requirement of CsI to be specified by Supplier <u>Active area:</u> 200 x 200mm²(minimum) (Supplier to specify) <u>Pixel matrix:</u> 1024 x 1024(minimum), (supplier to specify) <u>Pixel pitch:</u> 200micron or lesser preferably(supplier to specify) <u>Other selectable fields:</u> supplier to specify. <u>Men controlled detector adjustments:</u> Offset, Gain, Non linearity, pixel correction. (supplier to specify) <u>Automatic Adjustment and correction of bad pixel:</u> supplier to specify <u>Provision for Inverted 16 bit gray value image for film like inspection:</u> Supplier to specify <u>Applicable fields of X-Ray voltage:</u> 15kV to 320kV. <u>Conversion factor:</u> - supplier to specify in Cd/M² / µGy/second <u>Limiting visual resolution:</u> Supplier to specify (Without magnification & with magnification) <u>Integral distortion in percentage (%)</u> - Supplier to specify. <u>Shutter arrangement to be operated from control room</u>- Specify whether it is an integral part of the system or not. It is to be separately quoted if it is not a part of the system, but an accessory. (Supplier to specify.) <u>Mode:</u> preferably Dynamic Mode (Supplier to specify)</p>
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<p>4.2.1.2</p>	<p>Acquisition Station</p>	<p>(a) Acquisition Control Computer- -With Industrial Rack mount chassis, dual processors, min 1GB RAM, min 120GB hard disc capacity with Additional Graphics Card, DVD/CD and 89mm floppy drives, 100Base T network interface with RJ-45 socket, minimum 1280x1024 pixel & 0.25mm(maximum) pitch color monitor, key board and optical mouse. The acquisition system shall have sufficient disk space for temporary storage of over 2400 full frame digital radiographs. -Supplier to specify</p>
		<p>- Display: preferably, Automatic Gray scaling (16 to 8 bit conversion) for monitor display (supplier to specify)</p> <p>(b) Acquisition Control Software- -With graphical user interface. The software shall include a sequenced, graphical user interface to guide the operator through system initialization, calibration and validation, plus selection of each part. -Real Time / Near Real Time Images shall be displayed on a monitor connected directly to detector controller for Real time Image Processing, and to average and store multiple static images.</p> <p>-The images must be available for programming the ADR in real time. For this, the Supplier shall provide the source code of the image acquisition software or, provide the images in standard image format (BMP is preferred) in real-time (with out user specification or user prompted file saving) in a fixed location in the PC hard drive.</p>

4.2.1.3	Review Station	<p>Image Review station shall be networked to acquisition stations, and static images shall be automatically transferred to review station after acquisition.</p> <p>(a) Review station computer: (The system shall have the following minimum specifications</p> <ul style="list-style-type: none"> • Hard drive- over 2GHz processor, 1 GB(min) RAM, MIN 120GB hard disc, with Additional Graphics Card • Archival drive-DVD/CD RW AND 89 MM floppy drive • Monitor, key board, mouse 	
4.3	Dose overload	<p>(b) Review software: It shall be compatible with NIMA DICOM3.0 standard and with ASTM DINCODE standard for image format and functionality. It shall have the facility to make the image automatically available in BMP, JPEG and TIFF image file format for use in standard applications.</p> <p>Image Processing functions: The software should be capable of performing the following functions</p> <ul style="list-style-type: none"> - Noise reduction through integration. - Contrast enhancement - Edge enhancement - 16 bit filter capability, with different Kernel sizes. - Low pass filter, high Pass filter, median, crisper, pseudo 3D etc. - 8-bit type predefined filters for all type of image processing. 	
4.4	Temperature control system		
4.5	Input Electric Power Supply		
4.6	Calibration	<p>(Supplier to specify)</p> <p>The ambient temperature can be up to 40° c. The detector shall have a low maintenance, closed loop temperature regulating system, and triple regulated power supplies to stabilize detector operation.</p> <p>230 ± 10 % V, 50 Hz, Single Phase AC through a 3 wire system [Phase, Neutral & Protective Earthing]</p> <p>Factory calibration</p>	

4.7	Accessories	BIDDER to list down (with UNIT RATE) the various ACCESSORIES to be procured with the EQUIPMENT to enhance the Operating Efficiency and Features of the OFFERED EQUIPMENT, over and above those mentioned in the SPECIFICATIONS.	
4.8	Scope of supply	<p>Following shall be supplied compulsorily with the Equipment:</p> <ul style="list-style-type: none"> a) Digital Flat Panel System as per specification b) Power cables as required for inter connections c) Power supply cables d) Duplex wire type IQI EN 462 Part 5 e) Line pair 3 no.s f) Mountable operator control panel with keypads and cables. g) Remote Control Shutter for Flat Panel h) CCTV system i) Necessary Standard / Certificates traceable to National / International Standards. j) Spares. <ul style="list-style-type: none"> All signal cables-1 no. All printed control board-1no. each PCB for LI control -2 set All fuses-2set 	
5.0	Consumables for Main Equipment & Accessories	BIDDER has to list down the CONSUMABLES to be used in the Operation of the Equipment and QUOTE with UNIT RATE for all the listed consumables, to be procured with the equipment.	
6.0	Spares for Main Equipment & Accessories,	BIDDER has to list down the SPARES Printed Circuit Boards - PCBs, etc.) Coming under the Category of Mechanical, Electrical & Electronic Spares for the Main Equipment as well for the essential and optional desirable Accessories. To be replaced with actual spares and accessories. BIDDER to QUOTE with UNIT RATE for all the listed SPARES, to be procured with the equipment.	
7.0	Inspection	The Equipment & Accessories shall be offered for Inspection by	

8.0	Installation and Commissioning	BHEL Engineers and Performance Prove-Out. The Equipment with all Accessories is to be installed & commissioned at BHEL Works, FREE OF COST, by the Service Engineer of the SUPPLIER.												
9.0	Performance Prove-Out at BHEL	<p>The Supplier's Service Engineer has to conduct demonstration of the following in accordance with ASME Boiler and Pressure vessel code section 5 Article 2,Appendix 2.</p> <p><u>Resolution of the Digital Flat Panel System:</u> Supplier to demonstrate the resolution to ensure the following. Digital Flat Panel Detector System and Image display monitor should have minimum resolution 5 line pair /mm.(at MTF>20%)</p> <p>3 numbers of test reports for the above resolution verified with X-ray unit shall be submitted prior to BHEL dispatch.</p> <p><u>Contrast Sensitivity:</u></p> <p>IQI Sensitivity- Supplier to demonstrate using steel wedge Demonstration of IQI sensitivity placing ASTM strip -hole Type IQI on Source side for single wall thickness as below.</p> <table><tr><th>Steel thickness</th><th>ASTM IQI Designation</th><th>Image Quality</th></tr><tr><td>< 6mm</td><td>12</td><td>2-2T</td></tr><tr><td>6 to 9 mm</td><td>15</td><td>2-2T</td></tr><tr><td>9 to 12.5 mm</td><td>17</td><td>2-2T</td></tr></table>	Steel thickness	ASTM IQI Designation	Image Quality	< 6mm	12	2-2T	6 to 9 mm	15	2-2T	9 to 12.5 mm	17	2-2T
Steel thickness	ASTM IQI Designation	Image Quality												
< 6mm	12	2-2T												
6 to 9 mm	15	2-2T												
9 to 12.5 mm	17	2-2T												

		<p>PERFORMANCE PARAMETERS</p> <p>Spatial Resolution -Should be 4-5line pair/mm at MTF >20% Gray Resolution-Atleast 14 bit A/D conversion with 16-bit software Frame frequency-30 fps or better. Dynamic Range-Digital Flat Panel Detector shall have a Dynamic Range of 10,000:1 or more. Linearity - The Digital Flat Panel Detector shall behave in Linear fashion within in it's useful Dynamic Range. Mode-Real Time / Near Real Time Mode Imaging times (in seconds)-Supplier to specify</p>	
10.0	Documentation in ENGLISH Language	<p>3 Copies (In English) of the Operation & Maintenance Manuals containing Electric Schematics, Circuit Diagrams, PCB Drawings, Trouble Shooting Charts, Mechanical Sub-Assemblies, Rating of Bought-Out Items, etc. shall be supplied, at the time of inspection by BHEL Engineers. In addition, one <u>SOFT COPY</u> in CD to be supplied.</p>	
11.0	Performance Guarantee	<p>The Equipment & Accessories (including Bought-Out Items) are to be guaranteed for its performance for a minimum period of two years from the date of performance acceptance at BHEL Works.</p>	
12.0	Service and Spares Support Requirements.	<p>Vendor shall ensure after the guarantee period, through trained service personnel in India for next 5 years as and when need arise. Spares to be made available within in 1 week.</p>	
13.0	Training on Operation & Maintenance	<p>Complete Training for 2 BHEL Engineers is to be given on Operation & Maintenance of the OFFERED Training has to be provided at BHEL Works, after the successful commissioning of the Equipment & Accessories.</p>	
14.0	Annual Maintenance Contract - AMC	<p>The BIDDER has to QUOTE for AMC with detailed scope of work.</p>	
15.0	Safety and Quality Standards	<p>Supplier to ensure that Safety and Quality of Digital Flat Panel shall conform to International Standards. Conformance certificate to be along with the equipment.</p>	

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S. No.	PARTICULARS	VENDOR's RESPONSE
8.0	Details on International Standards followed in Design of the Equipment . Copies of the English version of the standards shall be furnished with technical offer.	
9.0	Comprehensive Details on Performance Testing - of the Equipment quoted, to be proven out in presence of BHEL Executives, prior to dispatch from Supplier's Works	
10.0	Details of Quality System followed (Kindly furnish the salient aspects of the QA system followed)	
11.0	Details on SERVICE-after-SALES Set-Up in India including the addresses of Agents/Service Centers in India and Asia	
12.0	Any Additional Data to supplement the manufacturing capability of the BIDDER	

SECTION - II

The BIDDER / VENDOR has to compulsorily meet the following requirements to get qualified for submitting an offer for the DIGITAL FLAT PANEL

S. No.	REQUIREMENTS	VENDOR's COMMENTS
13.0	The BIDDER / VENDOR shall have a minimum of TWO Years of Continuous Experience in the Design, Manufacture & DIGITAL FLAT PANELs .Indicate the actual experience.	
14.0	The BIDDER / VENDOR shall have supplied at least one number of DIGITAL FLAT Panels within the last five years. Indicate the number of equipment (of QUOTED MODEL) sold .	
15.0	Reference List of Customers and Performance Certificate from CUSTOMERS (minimum 1 Customer) with full contact details of CONTACT PERSON.	

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

S.No.	REQUIREMENTS	VENDOR's COMPLIANCE
16.0	The BIDDER / VENDOR shall submit the offer in TWO PARTS - Technical [with PART A & PART B] & Commercial and Price Bid. The Technical Offer shall be in line with the BHEL Technical Specifications and the Guidelines or Annexures mentioned, wherever applicable.	
17.0	The Offer shall contain a comparative statement of Technical Specifications given by BHEL and the Offer Details submitted by the Bidder, against each clause. A just 'CONFIRMED' or 'COMPLIES' or 'YES' or 'NO-DEVIATION' or similar words in the technical comparative statement may lead to disqualification of the Technical Offer.	
18.0	The BIDDER / VENDOR shall assure a continuous support for SPARES and SERVICE for four Years, from the date of commissioning of the equipment at BHEL Works.	
19.0	The Technical Offer shall be supported by Product Catalogue and Data Sheets in ORIGINAL and complete technical details of 'Bought-Out-Items' with copies of Product Catalogue and Selection Criteria.	
20.0	The Commercial Offer (given with the Technical Offer) shall contain the Scope of Supply and the Un-Priced Part of the Price-Bid, for confirmation of Scope of Supply.	
21.0	The reference List of Customers shall be accompanied with the details (Phone Number / E-Mail ID) of the CONTACT PERSON for cross reference by BHEL	

CAPITAL PURCHASE LSP / MM / FB

(To be filled and submitted along with Offer)

BHEL Commercial Terms and Conditions for Import Supplies**Vendor's Confirmation / Comments**

Technical confirmation to BHEL's Specification as called for in BHEL Format shall be furnished. If needed additional sheets shall be used.	
Prices shall be quoted item wise only as per the model format enclosed.	
Prices shall be quoted on "FIRM PRICE" basis only.	
Validity of offer shall be for a minimum period of 120 days from the date of Tender opening	
Delivery period from the date of Letter of Intent shall be clearly mentioned in the offer.	
Liquidated damages @ 1/4% per week: subject to a maximum of 15% of the order value shall be applicable for delay in deliveries.	
Following Risk Purchase clause shall be applicable: 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 or if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases.	
Payment terms for Foreign vendor (Principal): 80% value of the goods will be paid through an irrevocable Letter of Credit established by our bankers. Balance 20% will be paid against acceptance / commissioning of goods for which supplementary invoice and PBG for 10% of total Purchase order value shall be submitted. All bank charges outside India are to vendor's account only.	
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 / commissioning of the equipment.	
Erection / commissioning: Erection / commissioning shall be done at free of cost.	
Submission of Performance Bank Guarantee (PBG): Vendor should provide a performance bank guarantee (PBG) for 10% of the total Purchase order value valid for a period of 12 months from the date of commissioning (or) 18 months from the date of dispatch whichever is later with an additional claim period of 2 months. This PBG shall form part one of the documents for effecting the balance 20% payment.	
Part Shipment or Transshipment is not permissible	
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.	
Any warranty replacement during warranty period shall be supplied free of charge on FOR BHEL, Trichy basis.	
Equipment will be inspected and proved at vendor's works prior to dispatch. However final inspection and acceptance of equipment will be after installation at BHEL, Trichy.	
The equipment shall be guaranteed for a period of 12 months from the date of commissioning.	
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.	
Offers should be submitted only in sealed cover super-scribing clearly the Enquiry reference and due date.	

NOTE:

- 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.
- Your specific acceptance to our Payment terms, LD Risk Purchase Clause & Submission of PBG for 10% order value are essential for consideration of your offer. Other wise your offer is liable for rejection.

Signature & Office seal of the vendor

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BHEL

Bharat Heavy Electricals Limited, Trichirapalli – 620 014

(To be filled and submitted along with offer)

BHEL Commercial Terms and Conditions for Indigenous Supplies	Vendor's Confirmation / Comments
Technical confirmation to BHEL's Specification as called for in BHEL Format shall be furnished. If needed additional sheets shall be used.	
Prices shall be quoted item wise only as per the model format enclosed.	
Prices shall be quoted on " FIRM PRICE " basis only. The prices should be only on F.O.R / Despatching station basis inclusive of Packing & Forwarding charges if any. Applicable % of ED & Sales Tax, Freight & Insurance, Installation & Commissioning Charges should be clearly indicated.	
Validity of offer shall be for a minimum period of 120 days from the date of Tender opening	
Delivery period from the date of Letter of Intent / Purchase order shall be clearly mentioned in the offer.	
Liquidated damages @ ½% per week subject to a maximum of 15% of the order value shall be applicable for delay in deliveries.	
Following Risk Purchase clause shall be applicable: 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 or if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases.	
Submission of Performance Bank Guarantee (PBG): Vendor should provide a performance bank guarantee (PBG) for 10% of the total Purchase order value valid for a period of 12 months from the date of commissioning (or) 18 months from the date of dispatch whichever is later with an additional claim period of 2 months. This PBG shall form one of the documents for effecting payment. The PBG shall be submitted in non-judicial stamp paper value of not less than Rs.50/- issued by any one of the following banks who is a member bank in our consortium of banks. 1) State Bank of India, 2) State Bank of Hyderabad, 3) State Bank of Travancore, 4) State Bank of Mysore, 5) Canara bank, 6) Bank of Baroda, 7) Punjab National bank, 8) Deutsche Bank, 9) HDFC Bank, 10) Standard Chartered Bank, 11) Citi Bank, 12) Standard Chartered Grindlays Bank 13) Bank of America and 14) Any one of the Nationalised banks.	
Payment terms for supply portion: <ul style="list-style-type: none"> 100% payment will be made within 45 to 90 days after receipt and acceptance / commissioning of goods at BHEL against submission of PBG for 10% of Order value with required validity. (or) * 80% value of the goods will be paid within 45 to 90 days against dispatch documents negotiated through bank. Balance 20% will be paid within 45 to 90 days from the date of acceptance / commissioning of goods against submission of supplementary invoice and also against submission of PBG for 10% of Order value with required validity. All bank charges are to vendor's account only. 	
Erection / commissioning: Erection / commissioning shall be done at free of cost.	
The equipment shall be guaranteed for a period of 12 months from the date of commissioning.	
Equipment will be inspected and proved at vendor's works prior to dispatch. However final inspection and acceptance of equipment will be after installation at BHEL, Trichy.	
The vendor shall provide necessary drawings, Test Certificates and Operating Maintenance Manuals etc., as called for in the Technical Specification, in the required number of copies at no extra cost.	
Any warranty replacement during warranty period shall be supplied free of charge on FOR BHEL, Trichy basis.	
Offers should be submitted only in sealed cover super-scribing clearly the Enquiry reference and due date.	

NOTE:-

- 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.
- Your offer should be indicating applicable if any P&F Charges, % of ED, Sales Tax (CST or TNGST, Service Tax), Freight, Insurance and Installation and Commissioning Charges etc., as per our Price Format.
- 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. Other wise your offer is liable for rejection.

Signature & Office Seal of the vendor

CBF113427 **BHEL** FG

BHEL ENQUIRY NO & DATE

VENDOR OFFER REF NO. &

MODEL PRICE BID FORMAT FOR FOREIGN VENDORS

S.No. Description of Item

Unit Qty Rate

Value

Ex-works Value

Packing & Forwarding Charges, if
any

FOB charges, if any

FCA/ FOB Value

Approximate Freight charges

Approximate Transit Insurance
charges

Approximate Gross Weight, Nett
Weight & Dimensions of the
Consignment

Signature & Seal of Vendor

NOTE: The Price bid should submitted strictly in line with the above **FORMAT**.
(Model Price Bid Format for Indigenous vendors on the reverse)

BHEL, ENQUIRY NO & DATE

VENDOR OFFER REF NO. &
DATE

MODEL PRICE BID FORMAT FOR INDIGENOUS VENDORS

S.No.	Description of Item
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Unit	Qty	Rate	Rs	Value	Rs
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Ex-works Value Rs
Packing & Forwarding Charges, if any
FOR / Despatching Station value Rs
% of Excise Duty (extra or inclusive)
% of TAX (TNGST with FORM-17 or CST with C-FORM)
% of TAX (TNGST without FORM-17 or CST without C-FORM)
Surcharge on Tax
% of Any other Tax applicable other than the above
Approximate Freight charges Rs
Approximate Transit Insurance charges Rs
Approximate Gross Weight, Nett Weight & Dimensions of the Consignment

Signature & Seal of Vendor

**NOTE: The Price bid should submitted strictly in line with the above FORMAT.
(Model Price Bid Format for Foreign vendors on the reverse)**

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CONFIDENTIAL

CAPITAL PURCHASE: MM/FB
COMMERCIAL TERMS AND CONDITIONS

1.0 QUOTATIONS

The Bidders shall submit the offer in **TWO INNER ENVELOPES** as indicated below which shall be sealed in one outer envelope.

Envelope I This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked "**Part I - Technical and commercial bid**", indicating Enquiry No., Due Date and Address & Reference of the Bidder.

Envelope II This sealed envelope should contain price details. This envelope should be clearly marked "**Part II - Price bid**", indicating Enquiry No., Due Date and Address & Reference of the Bidder.

Both the envelopes (Part I & II) shall be put in one cover, duly sealed, superscribing as Part I and Part II of Enquiry No., due date of opening and the address and reference of the Bidder.

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:

DGM / CAPITAL PURCHASE /MM/FB
BHARAT HEAVY ELECTRICALS LIMITED
HIGH PRESSURE BOILER PLANT
TIRUCHIRAPALLI - 620 014
TAMIL NADU, INDIA

Contd 2/-

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Tenders should be free from **CORRECTION AND ERASURES**, Corrections if any, must be attested. All amount 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 prevail.

Offers should be in **ENGLISH** and accompanied by detailed technical literature, catalogue and detailed dimensional drawings in **ENGLISH** or otherwise, the offers will not be considered.

2.0 PART I (TECHNICAL & COMMERCIAL BID)

2.1 Technical

This part shall include / indicate the following :

- 2.1.1. Offer should contain complete scope of supply with all technical details, specifications, delivery and other commercial terms and conditions.
- 2.1.2. Point by point confirmation for the Technical Specification enclosed to be provided. if there are any deviation, the same should be clearly specified. Offers received without confirmation to our specification will be rejected.
- 2.1.3. List of customers to whom same or similar equipment have been supplied along with performance certificates to be enclosed.
- 2.1.4. Relevant catalogues to be attached
- 2.1.5. List of spares parts (with part numbers) for two years operation and maintenance should be attached.
- 2.1.6. Information on shipping weight and cubage (length, width & height) to be provided.
- 2.1.7. Incase of foreign bidder offer, the Principal's technical offer should be enclosed.

2.2 Commercial

This part shall include / indicate the following :

- 2.2.1. Port of shipment / Station of despatch
- 2.2.2. Terms of payment
- 2.2.3. Taxes & duties applicable.
- 2.2.4. Delivery Schedule

Contd 3/-

- 2.2.5. Offer validity
- 2.2.6. Country of origin
- 2.2.7. Percentage of agency commission if any along with a copy of Agency agreement.
- 2.2.8. A copy of "Un-Priced Part II" i.e., a copy of the Price Bid without the price details to be enclosed.

3.0 PART II (PRICE- BID)

This part should contain the schedule of price particulars and to be co-related to the technical details provided in Part I.

4.0 OPENING OF TENDERS

The Part I - Technical & commercial bid alone would be opened on the Tender opening date. The Part II - Price bid of Technically suitable Bidders alone would be opened. The Technically suitable Bidders would be informed about the tender opening date. Clarifications if any required by BHEL for Technical evaluation would be sought from Bidders before opening of Part II - price bid.

5.0 GENERAL

- 5.1. Incomplete offers will not be considered.
- 5.2. **Fixed price:** Prices quoted by the bidder shall be fixed and not subject to any escalation whatsoever during the period of bid validity and execution of the Purchase Order. A bid submitted with an adjustable price will be treated as non - responsive and rejected. Prices shall be written in words and figures. In the event of difference, the price in words shall be valid and binding. Unit prices shall be considered correct in the event of any discrepancy with regard to total price.
- 5.3. **Bid currency:** Indian bidders should submit the prices only in Indian Rupees. Foreign bidders may submit their bid in their home currency.
- 5.4. **Terms of Delivery:** Bidders are required to quote their best delivery period. Foreign Bidders should submit their offer for net **FOB Nearest Sea / Air Port**. Indian Bidders should submit their offer for **FOR Despatching station**.

Contd 4/-

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5.5. **Taxes and Duties :** All Taxes and Duties payable as extra to the quoted price should be specifically stated in offers along with CST & TNGST No / Tariff No. etc., failing which the purchaser will not be liable for payment of such Taxes and Duties. Our T.N.G.S.T No. 356005 Dt. 04-04-1995, C.S.T. No. 239383 dt. 11-06-1991.

5.6. **Validity :** The offers for main equipment and spares shall be kept open for acceptance for 120 days (one hundred and twenty days) from the date of opening of the tender (Part.I).

5.7. **Terms of Payment :**

5.7.1. **Indian Bidders**

5.7.1.1. The preferred payment terms are indicated below :

5.7.1.2. 100% payment, within 45 to 90 days, after receipt / acceptance / commissioning of equipment at BHEL, Tiruchi, against submission of 10% Performance Bank Guarantee on total order value.

or

5.7.1.3. 80% payment against documents through bank within 45 to 90 days, (after pre-despatch inspection) and balance 20% payment after receipt / acceptance / commissioning of the equipment 45 to 90 days, 45 to 90 days against submission of 10% Performance Bank Guarantee on total order value.

5.7.2. **Foreign Bidders**

An Irrevocable Letter of Credit shall be established for 80% of the value of the goods. Balance 20% shall be paid on receipt / acceptance / commissioning of the goods at BHEL against submission of Performance Bank Guarantee for 10% on total order value. All bank charges outside India are to Vendor's account.

5.8. **Performance Bank Guarantee (PBG):** The Bidder, in the event of an order, should furnish a bank Guarantee from an Indian Bank approved by BHEL, at no extra cost in a proforma prescribed by BHEL, alongwith the order, for an amount equivalent to 10% (Ten percent) of the value of the contract. The PBG shall be valid for period of 18 months from the date of dispatch or 12 months from the date of receipt / acceptance / commissioning of the equipment at BHEL, Tiruchi whichever is later with additional claim period of 2 months.

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The Performance Bank Guarantee shall be obtained from any one of the following banks who is a member bank in our consortium of banks.

- 1) State Bank of India, 2) State Bank of Hyderabad, 3) State Bank of Travancore, 4) State Bank of Mysore, 5) Canara Bank, 6) Bank of Baroda, 7) Punjab National Bank, 8) Deutsche Bank, 9) HDFC Bank, 10) Standard Chartered Bank, 11) Citi Bank, 12) Standard Chartered Grindlays Bank, & 13) Bank of America or any Nationalised Bank

- 5.9. **Liquidated damages :** It is clearly understood among the parties to the contract the " Time is the essence of the contract ". Therefore, the delivery of the goods specified in the purchase order should be made within the time prescribed. Where the seller supplies or despatches the goods, beyond the delivery period specified the purchaser will have no obligation to accept the goods. If accepted liquidated damages at the rate of 1/2% of the value of goods delayed for each week of delay subject to a maximum of 15% of the order value will be levied.
- 5.10. **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 supplier has failed to deliver or despatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute therefor. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases.
- 5.11. **Agency commission :** In case of Foreign Bidders, agency commission if any, payable to their Indian Agents, shall shown separately in the Offer. This will be paid by us in India, in Indian Rupees, on satisfactory completion of the Contract. Copies of current Agency Agreement / Authorization Letter in respect of Agency Commission shall be furnished alongwith offer. For calculation of Rupee equivalent of Agency Commission, exchange rate as prevailing on the date of offer will be taken.
- 5.12. **Test certificates / Operating and Maintenance manuals :** The Bidders shall clearly mention in their offer, that Test Certificates and Operating Maintenance Manuals, etc., as called for in the Technical Specification, in the required number of copies will be provided at no extra cost.

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- 5.13. **Modvat credit :** (for Indian Bidders only) If any Excise Duty is payable, the chapter head / sub-head reference and the rate of the duty should be quoted. If the tender is availing **MODVAT** credit for his input materials, the effect of proforma credit should be passed on to the purchaser.
- 5.14. **Packing and marking :** The Supplier shall arrange for securely protecting and packing the stores to avoid loss or damages during transit.
- 5.15. **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**.

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