REQUEST FOR QUOTATION



BHARAT HEAVY ELECTRICALS LIMITED Electronics Division PB No. 2606, Mysore Road Bangalore - 560026 INDIA

RFQ NUMBER: KMVM900345

Due Date 16.OCT.2009 Time: 13:00 HRS

RFQ DATE : 09.SEP.2009

VENUE : **NEW ENGG. BLDG**

(for all correspondence)
Purchase Executive : VEERACHARI KM

Phone: 080-26998663 Fax: 00918026740138

E-mail: veerachari@bheledn.co.in

Please submit your lowest quotation subject to our terms and conditions attached for the material mentioned below. The quotation must be enclosed in a sealed envelope / Fax superscribed with RFQ no.and due date, should reach us on or before the due date by 13.00 hours IST and will be opened on the same day at 13.30 hours at the venue mentioned above. PLEASE DROP THE OFFER IN THE BOX PROVIDED AT RECEPTION.

SPECIAL TERMS AND CONDITIONS:

- 1. TENDER/OFFER MUST BE SUBMITTED IN TWO PARTS: 1.TECHNO COMMERCIAL BID 2.PRICE BID.
- 2. QUOTATIONS MAY BE SUBMITTED BY ORIGINAL EQUIPMENT MANUFACTURER'S (OEM'S) OR THEIR AUTHORISED DEALERS.
- 3. VENDOR HAS TO CONFORM TO THE CLAUSES IN THE PURCHASE SPECIFICATIONS(EDN/CEFAB/GLM/01). DEVIATIONS, IF ANY, TO BE BROUGHT OUT CLEARLY IN THE TECHNICAL BID.
- 4. VENDOR IS ADVISED TO GO THROUGH THE GENERAL TERMS AND CONDITIONS, DOCUMENT CPD-20000 ENCLOSED WITH THIS RFQ.
- 5. VENDOR HAS TO CONFORM TO ALL THE CLAUSES LISTED IN THE COMMERCIAL TERMS (ANNEXURE A/B). DEVIATIONS, IF ANY, TO BE HIGHLIGHTED AND BROUGHT OUT CLEARLY IN THE TECHNICAL BID.
- 6. DELIVERY REQUIRED: 24 WEEKS FROM THE DATE OF PO.
- 7. TERMS OF PAYMENT: 80% BY SIGHT DRAFT / WITH 30 DAYS CREDIT AFTER RECEIPT OF MATERIAL, 10% AFTER INSTALLATION & COMMISSIONING AND 10% AGAINST SUBMISSION OF PERFORMANCE BANK GURANTEE(PBG) OR AFTER WARRANTY PERIOD.
- 8. QUOTATION SHOULD BE VALID FOR 90 DAYS FROM DUE DATE.
- 9. BHEL RESERVES THE RIGHT TO RESORT TO REVERSE AUCTION BEFORE THE PRICE BID OPENING.

Sl No.	Description	Qty	Unit	Delivery qty	Delivery Date
	CNC Hyd Shear M/C, Spc EDN/CEFAB/GLM/01	1	NO	1	30.NOV.2010
1					

Total Number of Items -

Please note that the tender will be opened in the presence of the bidders or his authorised representatives (maximum two per organisation) who choose to be present with authorisation letters. Refer annexure for the terms and conditions.

Preference will be given to vendors who accepts our standard payment terms i.e.100% payment - 30 days after receipt of material at our works subject to acceptance. Please specify Terms of delivery, Excise duty, sales tax, Ex-BHEL, Ex-works surcharge, Insurance, P&F, Freight and other taxes very clearly.

- i). This is only RFQ not an order.
- ii). In all correspondence quote RFQ No. & due date.
- iii). In Quotation BHEL material code / RFQ Sl. No. should be mentioned clearly.
- iv). Quotation Envelope / Fax not superscribed with RFQ No. and due date is liable for rejection.
- v). Quotation should remain valid for a minimum peiod of 90 days from due date.
- vi). In case of non-receipt of Quotation or regret letter for 3 consecutive RFQs you are liable to be removed from our vendors list.
- vii). All Prices should be written in words and numbers.
- viii). Excise Chapter Heading should be mentioned for all items where VAT is applicable a

For and On behalf of BHEL.

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Specification No. EDN/CEFAB/GLM/01

SPECIFICATION CUM COMPLIANCE CERTIFICATION

FOR

CNC HYDRAULIC GUILLOTINE SHEARING MACHINE

NOTE:-

- 1. Vendor must submit complete information against clause no. 21.0 The offer meeting this clause would only be processed.
- 2. The "Offered" Column and where applicable, the "Deviations" & "Remarks" Column of this format shall be filled in by the Vendor and submitted along with the offer. Inadequate / incomplete, ambiguous, or unsustainable information against any of the clauses of the specifications/requirements shall be treated as non-compliance.
- 3. The offer and all documents enclosed with offer should be in English language only.

SCOPE: SUPPLY, ERECTION &COMMISSIONING OF CNC SHEARING MACHINE AS SPECIFIED BELOW

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
1.0	PURPOSE & WORKPIECE MATERIAL				
1.1	Purpose: Shearing of sheets up to 6.0 mm thick In Mild Steel to IS 513 Grade D	Vendor to confirm			
1.2	Work Piece Material: Mild Steel, Copper, Aluminium, FRP, Stainless Steel	Vendor to confirm			
2.0	MACHINE SPECIFICATION				
2.1	MACHINE CONFIGURATION: CNC Hydraulically operated, variable rake angle, Motorized blade clearance adjustment, CNC controlled swing back gauge with precision ball screws and AC Servo Motor & Drive. Front Gauging with DRO, Pneumatic/Hydraulic plate support system on the rear side of the machine.				
2.2	CAPACITY & SIZE				
2.2.1	Shearing Capacity (in Mild Steel to IS 513 Grade D)	6.00 mm X 3000 mm			
2.2.2	Max Job Size	2.5 m x 1.25 m			
2.2.3	Max. Weight of Work-piece	200 Kg			
2.2.4	Rake Angle Adjustment	0.5 to 2.0 Deg			
2.2.5	Automatic /Adjustable / Variable Rake Angle calculated by controller for Material & Sheet Thickness.	Vendor to confirm			
2.2.6	Blade Clearance Adjustment	0.05 to 0.8 mm			
2.2.7	Automatic Adjustable / Variable Blade Clearance calculated by controller for Material & Sheet Thickness.	Vendor to confirm			
2.2.8	Adjustable Stroke Length	Vendor to confirm			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
2.2.9	Sheet Clamping / Hold Down	Hydraulic hold down pads			
2.2.10	Sheet Clamping Force	Vendor to specify			
2.2.11	No of Hold Down pads	16 (minimum)			
2.2.12	No of Strokes per minute for max cutting / min cutting width	10 / 30			
2.2.13	Motor Power	7.5 K W (min)			
2.2.14	Throat Gap	150 mm (min)			
2.2.15	Working Height from floor Level	800-900 mm			
2.3	TABLE & SHEET SUPPORTS				
2.3.1	FRONT & REAR SHEET SUPPORT				
2.3.1.1	Roller / Ball sheet supports at the rear end (With Tilting Mechanism)	Vendor to specify			
2.3.1.2	Size of Rear Sheet Support (minimum)	200 x 2500 mm			
2.3.1.3	Roller / Ball transfer sheet supports at the front end Fixed	Vendor to specify			
2.3.1.4	Size of Front support	500 x 3000 mm			
2.3.2	MOVABLE SUPPORT TABLES WITH BALL / BRUSH TOP				
2.3.2.1	Table with castor wheels (height to match machine top)	900 x 900 mm			
2.3.2.2	No of Movable Support Tables (Stackable / Foldable)	6 Nos			
2.3.2.3	Table Top	Brush / Ball			
2.3.2.4	Capacity of each Table	50 Kg			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
2.4	SQUARING ARM / SUPPORT ARM / FINGER GUARD				
2.4.1	Fixed Squaring arm (One on the Left Hand Side) (minimum Length)	3000 mm			
2.4.2	Middle Support Stub Arms (Three Numbers) : (minimum Length)	1250 mm (min)			
2.4.3	Shadow line cutting facility.	Vendor to Confirm			
2.4.4	Finger guard / Laser Beam guard (Interlocked)	Vendor to Confirm			
2.4.5	Finger guards to be segmental type, foldable	Vendor to Confirm			
2.5	MOTORISED BACKGAUGE				
2.5.1	The machine should be provided with a motorised Back gauge. The Back gauge shall be of swing away type. Back gauge shall be equipped with digital AC Servo Drives of either FANUC or SIEMENS and driven by AC Servo motors of either FANUC or SIEMENS	Vendor to confirm			
2.5.2	Range of movement	10 mm to Maximum traverse			
2.5.3	Positional Accuracy	0.l mm			
2.5.4	Traverse	1000 mm (minimum)			
2.5.5	Traverse Speed (minimum)	100 mm / sec			
2.5.6	Feed back system for Back gauge. (Details to be submitted)	Vendor to specify			
2.5.7	Details of System to ensure zero backlash for back gauge	Vendor to specify			
2.5.8	Mechanism for locking / clamping the axes	Vendor to specify			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
2.5.9	Detail of feed mechanism (Details should include specification and number of Ball Screws etc.)	Vendor to specify			
2.5.10	All linear traversing axes shall be provided with Steel Telescopic covers of rust resistant material with wipers. Joints of telescopic covers should be so sealed to avoid mixing of lubricating oil.	Vendor to confirm			
2.5.11	Back gauge settings linked to clearance	Vendor to confirm			
2.5.12	Back gauge parallelism adjustment	Vendor to confirm			
2.5.13	Back gauge retraction after clamp down for narrow strips	Vendor to confirm			
2.5.14	Back gauge swing mechanism for cutting sheets more than gauge traverse	Vendor to confirm			
2.6	FRONT GAUGING				
2.6.1	Front Gauge on Fixed Squaring Arm				
2.6.1.1	Disappearing Stop with Digital Read Out	3000 mm			
2.6.1.2	Range of Position Read out	0 - 3000 mm			
2.6.1.3	Details of Quick Locking Mechanism & Micro Adjustment	Vendor to specify			
2.6.1.4	Details of Sliding Mechanism	Vendor to specify			
2.6.1.5	Minimium Setting with micro adjustment	0.1 mm			
2.6.1.6	Mechanism for Disappearing Stopper	Vendor to specify			
2.6.1.7	Type and details of encoder used for measurement.	Vendor to specify			
2.6.1.8	Type of Display: Bright 7 Segment 19 mm LED Panel with 6 digits (8888.88)	Vendor to confirm			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
2.6.2	Front Gauge on Stub Arm				
2.6.2.1	Disappearing Stop with Digital Read Out.	1250 mm (min)			
2.6.2.2	Range of Read out.	0 - 1250 mm			
2.6.2.3	Details of Quick Locking Mechanism & Micro Adjustment	Vendor to specify			
2.6.2.4	Details of Sliding Mechanism	Vendor to specify			
2.6.2.5	Minimium Setting with micro adjustment	0.1 mm			
2.6.2.6	Mechanism for Disappearing Stopper	Vendor to specify			
2.6.2.7	Type and details of encoder used for measurement.	Vendor to specify			
2.6.2.8	Type of Display: Bright 7 Segment 19 mm LED Panel with 6 digits (8888.88)	Vendor to confirm			
2.7	CONSTRUCTION:				
2.7.1	Vendor to furnish material, hardness of guideways & constructional details, including explanatory drawings, of various components/ assemblies like Gear Box, Guideways/ slides, Telescopic covers, Accessories, Table, feed transmission system, hydraulic and lubrication system, feed back system etc. of the machine.	Vendor to specify			
2.7.2	Video CD including hard copy explaining the technical features / Literature with photographs, drawings explaining the technical features should be enclosed with the offer	Vendor to specify			
2.7.3	The blade beam guides shall have hardened slide ways and heavy duty pre-loaded guide rollers.	Vendor to Confirm			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
2.7.4	The Shear blade shall be of single blade construction and detailed manufacturing drawing indicating material specification, tolerance and hardness shall be furnished. The Shear blades shall have 4 (four) cutting edges. Upper and lower blade adjustment through adjustable blade support blocks. Blade should be capable of cutting Stainless Steel.	Vendor to Confirm			
2.7.5	Shear construction and cutting accuracy should follow DIN 55804, Class I standard. Vertical square & clean cut. Minimum bow, twist and camber and saber effect.	Vendor to Confirm			
2.7.6	The Blade construction as per relevant DIN Standard. Material of Blades to cut material up to 700 N/ Sq mm.	Vendor to Confirm			
2.7.7	The Hydraulic Cylinders & Pistons to be Ground and Lapped for high MTBF of Seals.	Vendor to Confirm			
2.7.8	Motorized blade clearance adjustment through control panel with direct reading	Vendor to Confirm			
2.7.9	Rake angle adjustment through control panel with direct reading.	Vendor to Confirm			
2.7.10	Direct cutting length / stroke adjustment facility.	Vendor to Confirm			
2.7.11	Sheet support facility for the smooth disposal of sheared materials.	Vendor to Confirm			
2.8	OPERATOR'S PANEL:				
2.8.1	Fixed / Swiveling type operator's panel (LED/TFT/LCD) having complete CNC and machine control system with display of required configuration shall be provided on the operators platform. All switches with suitable interlock should be within reach of operator of average height (Indian) for easy & safe operation. All displays/indications should also be conveniently placed accordingly. Layout showing complete details should be submitted.	Vendor to Confirm			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
2.9	CNC SYSTEM & FEATURES :				
2.9.1	Make	Vendor to specify			
2.9.2	Туре	Vendor to specify			
2.9.3	Model (Latest version, as available at the time of ordering should be supplied)	Vendor to specify			
2.9.4	Details of Standard features (List to be Submitted)	Vendor to specify			
2.9.5	Details of optional features, recommended by vendor. (Including features required for Prove-Out Components)	Vendor to specify			
2.9.6	Details of other optional features which are to be selected by indentor	Vendor to specify			
2.9.7	The system should have keyboard TFT / LCD display (7" or more), electronic hand wheels to move back gauge manually, Flash drive for data input/output, graphic interface and preinstalled system software & other required softwares etc.(Details should be submitted by Vendor)	Vendor to specify			
2.9.8	Provision for automatic safe shut down of CNC Control in case of Power Failure	Vendor to specify			
2.10	MANUAL CONTROL:				
2.10.1	Complete manual control of machine with required switches/ keys should be provided on operator's panel for moving back gauge, blade, clearance, rake angle and other parameters.	Vendor to Confirm			
2.11	UPS FOR CNC SYSTEM:				
2.11.1	UPS of 30 minutes for CNC system with inbuilt cooling and charge status display (Battery charging /discharging time should be specified by vendor)	Vendor to Confirm			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
2.12	MACHINE LIGHTS:				
1 / 1/ 1	Machine Lights for sufficient illumination of complete working area should be provided for clear visibility.	Vendor to specify			
2.12.2	Laser Shadow light for locating the blade position.	Vendor to specify			
2.12.3	All light fittings, consumables, adapters/receptacles should have compatibility with Indian equivalents	Required			
2.12.4	Flashing / rotary type End of Cutting and Program Stop Light.	Required			
2.12.5	Hydraulic Power Pack Make, Model etc.(Should comply with IEC / IS specifications)	Vendor to specify			
2.13	HYDRAULIC SYSTEM: Details should be submitted by the vendor.				
2.13.1	The System should have centralized Hydraulic Tank minimum capacity 4 times of the pump flow.	Vendor to specify			
2.13.2	Make Rexroth / Vickers Sperry or equivalent from a reputed manufacturer. (Details to be submitted)	Vendor to specify			
2.13.3	Filtration System	Required			
2.13.4	Failure indication	Required			
2.13.5	Automatic shut off provision (Details to be submitted)	Vendor to specify			
2.13.6	Hydraulic pump capacity (flow / pressure)	Vendor to specify			
2.13.7	Each pump should have an independent motor. Tandem pumps should not be used	Required			
2.13.8	First filling of all required oil & grease etc. should be supplied by vendor. Indigenous (Indian) source, or Indian Equivalent, and specifications of oils/ greases also should be provided by the vendor.	Vendor			

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2.14	ELECTRICAL:				
2.14.1	415V + 10% / -10%, 50HZ +/-3 HZ, 3 Phase AC (3 wire system with out neutral) Power Supply Voltage will be provided by BHEL at a single point near the machine, as per layout recommended by Vendor. All types of cables, connections, circuit breakers etc. required for connecting BHEL's power supply point to different parts of the machine/control cabinets, shall be the resposibility of vendor. Requirement of grounding/earthing with required material details is to be informed by vendor well in advance so that same could be incorporated during construction of foundation.	Vendor to Confirm			
2.14.2	Tropicalisation: All electrical / electronic equipment shall be tropicalized	Vendor to Confirm			
2.14.3	All electrical & electronic control cabinets & panels should be dust and rodent proof.	Vendor to Confirm			
2.14.4	All electrical components should be mounted on DIN Rail	Vendor to Confirm			
2.14.5	All electrical and electronic panels including operator's panel should be provided with fluorescent lamps for sufficient illumination and power receptacles of 220Volts, 5/15 Amp AC. All adapters/receptacles should have compatibility with Indian equivalents.	Vendor to Confirm			
2.14.6	Motors shall conform to IEC or Indian Standards	Vendor to Confirm			
2.14.7	All cables moving with traversing axes should be installed in caterpillar / Drag chain. Additionally, all the cable trays required for laying of cables should be included in the offer.	Vendor to Confirm			
2.14.8	Vendor should ensure the proper earthing for the machine and its peripherals.	Vendor to Confirm			
2.14.9	In-cycle hour counter with reset facility.	Vendor to Confirm			
2.14.10	The electrical components used shall be from reputed international makes such as Siemens / Telemechanique / Merlin Gerin / GE / ABB and shall be in accordance with DIN/IEC standards.	Vendor to Confirm			

DESC	CRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
SAFE	TY ARRANGEMENTS:				
	wing safety features in addition to other standard safety features should be ided on the machine:				
dama mista warni	achine should have adequate and reliable safety interlocks / devices to avoid age to the machine, workpiece and the operator due to the malfunctioning or akes. Machine functions should be continuously monitored and alarm / ling indications through lights/ alarm number with messages (on CNC display banels) should be available. Details to be part of technical bid.				
	detailed list of all alarms / indications provided on machine should be nitted by the supplier.				
prote	the pipes, cables etc. on the machine should be well supported and ected. These should not create any hindrance to machine operator's ement for effective use of machine.				
	the rotating parts used on machine should be statically & dynamically nced to avoid undue vibrations.	Vendor to confirm			
	nergency Switches at suitable locations as per International Norms are to be ided. (Two Emergency Stops at Both ends of the Machines are required)				
6. Oil trenc	I & water pipe lines should not run with electrical cable in the same tray /				
7. Fol	Idable segmented finger guards to be provided (3 Nos x 1 meter each)				
	ecessary protection shall be provided in the Hydraulic power pack to prevent over loading.				
9. Pho	oto electric / laser finger guard				

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
2.16	ENVIRONMENTAL PERFORMANCE OF THE MACHINE :				
	The Machine shall conform to following factors related to environment :				
	(a) Maximum noise level shall be 85 dB(A) at normal load condition, 1 M away from the machine with correction factor for back ground noise, if necessary. This will be measured as per international standards like DIN 45635-16. Supplier to demonstrate compliance to noise level.	Vendor to confirm			
	(b) There shall not be any emissions from the machine	Vendor to confirm			
	(c) There should not be any effluent from the machine. In case there are any effluents from the machine, requisite effluent treatment plant or pollution control device should be built into the machine by the supplier.	Vendor to confirm			
	(d) No hazardous chemicals shall be required to be used in the machine.	Vendor to confirm			
	(e) If any safety / environmental protection enclosure is required it should be built in the machine by the vendor.	Vendor to confirm			
	(f) Paint of the machine should be oil / coolant resistant and should not peel off and mix up with coolant.	Vendor to confirm			
3.0	SERVO STABILIZER:				
3.1	Indian make Oil / Air Cooled Servo Controlled Voltage Stabilizer suitable for complete machine, its drives, controls, PLC etc. with no undesirable Harmonics in the stabiliser output.	Required			
3.2	Make of a reputed manufacturer	Vendor to Specify			
3.3	Model & Rating	Vendor to Specify			
3.4	Spares Package for the Voltage Stabiliser for 2 years working should also be offered.	Vendor to Specify			
3.5	Catalogue of the Voltage Stabiliser shall be submitted with the offer.	Vendor to Specify			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
4.0	ULTRA ISOLATION TRANSFORMER	Vendor to Specify			
4.1	Indian make Ultra Isolation Transformer suitable for complete machine, its drives, controls, PLC etc.	Vendor to Specify			
4.2	Make of a reputed manufacturer	Vendor to Specify			
4.3	Model & Rating	Vendor to Specify			
4.4	Spares Package for the Ultra Isolation Transformer for 2 years working should also be offered.	Vendor to Specify			
4.5	Catalogue of the Ultra Isolation Transformer shall be submitted with the offer.	Vendor to Specify			
5.0	DIAGNOSTIC SYSTEM				
5.1	Supplier's own diagnostic system with required hardware and software should be supplied and installed on the CNC system. This should include standard autodiagnostic system with supporting hardware and software which shows detailed cause and remedy for the fault on the display and supplier's smart diagnostic system for full video diagnostic help for faults related to mechanical and electrical maintenance.	Required			
5.2	Help guide should be provided to use the diagnostic system.	Required			
6.0	LEVELING & ANCHORING SYSTEM				
6.1	Complete anchoring system including foundation bolts, anchoring materials, fixators, leveling shoes etc should be supplied	Vendor			

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7.0	TOOLS FOR ERECTION, COMMISSIONING, OPERATION & MAINTENANCE :				
7.1	Special tools and equipment required for erection and necessary tools like Torque Wrench, Spanners, Keys, grease guns etc.for operation and maintenance of the machine should be supplied. List of such tools should be included with offer	Vendor			
8.0	ESSENTIAL ACCESSORIES.				
8.1	Rear Sheet Support Mechanism: Necessary sheet support arrangement shall be provided to hold-up the sheet till end of the cut to avoid buckling effect on both small and large sheet. After the sheet has been cut, the arrangement should dispose the sheet to the floor level/trolley. Details of the mechanism to be submitted along with the offer.	Required			
8.2	Additional Blades: Two set of shear blades required additionally apart from one set fixed on the machine.	Required			
9.0	SPARES:				
9.1	Itemised breakup of mechanical, hydraulic, electrical and electronic spares used on the machine in sufficient quantity as per recommendation of Vendor for 2 years of trouble free operation on three shifts continuous running basis should be offered by vendor. The list to include following, in addition to other recommended spares: (Unit Price of each item of spare should be offered in the price bid)	Vendor			
	a) Mechanical & Hydraulic Spares: All types of Pumps, Valves, Pressure Switches, Transducers, Flow Switches, Filters, Seals, O-rings, Hydraulic Hoses etc.	Vendor			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
	b) Electrical /Electronic / CNC Spares: All types of Relays, Contactors, Proximity Switches, Push Buttons, Indicating Lamps, Semiconductor Fuses, Special Fuses, Circuit Breakers, Main Power Switch, Encoders, Scanning Heads for Linear Scales, MMC module, NCU module, Operator's panel with Display Unit, Floppy Disk Unit, I/O Cards for PLC, Servo Motors for Feed Drives, Power Module & Control Cards for Main Drive as well as Feed Drives etc.	Vendor			
9.2	All types of spares for total machine and accessories should be available for atleast ten years after supply of the machine. If machine or control is likely to become obsolete in this period, the vendor should inform BHEL sufficiently in advance and provide drawings of parts / details of spares & suppliers to enable BHEL to procure them in advance, if required.	Vendor			
9.3	Recommended set of spares for all attachments are to be offered with details.	Vendor			
	Vendor to confirm that complete list of spares for machine and accessories, along with specification / type / model, and name & address of the spare supplier shall be furnished along with documentation to be supplied with the machine	Vendor			
9.5	Supplier to provide AMC details and value for post warrantee period.	Required			
10.0	DOCUMENTATION: Five sets of following documents (Hard copies) in English language should be supplied along with the machine				
10.1	Operating manuals of Machine & CNC system	Vendor			
10.2	Programming Manuals of Machine & CNC system	Vendor			
10.3	Detailed Maintenance manual of machine with all drawings of machine assemblies/sub-assemblies/parts including Electrical / Pneumatic/ Coolant / Hydraulic circuit diagrams. All Assembly/ Sub Assembly Drawings shall be supplied with the part list also	Vendor			
10.4	Maintenance, Interface & commissioning manuals for CNC system, spindle & feed drives.	Vendor			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
10.5	Manufacturing drawings for all supplied tool holders, coolant connections, adapters, sleeves, fixtures, Shear Blades etc.	Vendor			
10.6	Catalogues, O&M Manuals of all bought out items including drawings, wherever applicable.	Vendor			
10.7	Detailed specification of all rubber items and hydraulic/lube fittings	Vendor			
10.8	Operating Manuals, Maintenance Manuals & Catalogues for supplied Automatic Tool Offset & Job Measuring Systems, Voltage Stabilizer, Isolation Transformer, Air-Compressor and all supplied Accessories.	Vendor			
10.9	PLC program print-outs with comments in English.	Vendor			
10.10	PLC program, NC data & PLC data on CD	Vendor			
10.11	Complete back-up of hard disk on CD and clear written Instructions (3 copies) to take back-up and reloading of data.	Vendor			
10.12	Complete Master List of parts used in the machine shall be submitted by the vendor.	Vendor			
10.13	One additional set of all the above documentation on CD ROM, wherever possible.	Vendor			
11.0	SERVICE CENTER / OFFICE IN BANGALORE				
11.1	Vendor should have an established office in Bangalore City with trained personnel for providing prompt service backup. Necessary Documents for establishing the same to be submitted along with the offer.	Vendor to Confirm			
11.2	Offers of those suppliers not having an established service center in Bangalore will be rejected.	Vendor to Note.			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
12	TRAINING				
12.1	BHEL Persons should be trained at supplier's Works for mutually agreed period in the area of: (a) CNC Part Programming / Technology, Use of all CNC Features, Programming for Measuring Systems & supplied accessories etc. (b) Electrical, Electronic & CNC maintenance for machine & other supplied equipments (c) Mechanical & Hydraulic maintenance of the machine & other supplied equipments (d) Operation of the machine & other supplied equipments.	Vendor			
12.2	Competent, English speaking experts shall be arranged by the vendor during training for satisfactory & effective training of BHEL personnel.	Vendor			
13.0	FOUNDATION				
13.1	Vendor shall submit the preliminary layout drawing for getting BHEL's approval within one month from the date of Letter of Intent (LOI) / P.O. whichever is earlier. Soil condition data will be furnished by BHEL along with the approval. Complete Foundation Design including details viz. static / dynamic load details etc. and Final Layout drawings shall be submitted by the supplier within three months after getting BHEL's approval. The layout should consist of all reqirements pertaining to complete machine including space requirement for Voltage Stabilizer, Isolation Transformer, Air compressor, Chip Bin & any other accessories. BHEL shall construct complete foundation for the machine under supervision of supplier and at supplier's responsibility. Vendor should arrange equipments required for the testing of foundation, if required by the vendor. The vendor shall also indicate detailed specifications of grouting compound and Grouting procedure etc. for foundation bolts of the machine.	Vendor			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
14.0	ERECTION & COMMISSIONING				
14.1	Supplier to take full responsibility for carrying out the erection, start up, testing of machine, it's control & all types of other supplied equipment, machining of test pieces etc. Service requirement like power, air & water shall be provided by BHEL at only one point to be indicated by supplier in their foundation/layout drawings. Other requirements of tools, tackels, equipment for handling, movement, erection, installation shall be provided by the vendor.	Vendor			
1 14 /	Erection & Commissioning of Voltage stabilizer, Isolation Transformer & Air Compressor shall also be responsibility of the vendor.	Vendor			
14.3	Successful proving of BHEL components by the supplier shall be considered as part of commissioning. All tests, as mentioned at clause 17 (Machine Acceptance) shall form part of the commissioning activity.	Vendor			
14.4	Tools, Tackels, Test Mandrels, instruments and other necessary equipment including Laser equipment required to carry out all above activities should be brought by the supplier.	Vendor			
14.5	Commissioning spares, if required for commissioning of the machine within stipulated time, shall be brought by the supplier on returnable basis.	Vendor			
1 14 n	All Cover Plates required for the machine and its peripherals including pits, if any, shall be supplied and installed by the vendor.	Vendor			
14.7	Portion, if any, of the machine, accessories and other supplied items where paint has rubbed off or peeled during transit or erection should be repainted and merged with the original surrounding paint by the vendor. For this purpose, the vendor should supply sufficient quantity of touch-up paint of various colours of paint used.	Required			
14.8	Schedule of Erection and Commissioning shall be submitted with the offer.	Vendor			
14.9	Duration, terms & conditions for E&C should be furnished in detail by vendor along with offer.	Vendor			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
15.0	ACCURACY TESTS:				
15.1	Positioning accuracy in Front Gauge per 1000 mm (Vendor to specify the Standard)	±0.1 mm			
15.2	Minimum Step in Front Gauge Micro Adjustment.	0.1 mm			
15.3	Positioning accuracy over entire traverse in Front Gauge	Vendor			
15.4	Squareness of Sheet in the Squaring Arm	±0.1 Degree			
15.5	MACHINE POSITIONING ACCURACIES & REPEATABILITY: Should be measured as per VDI/DGQ 3441 (Latest Revision) using LASER INTERFEROMETER.	Vendor to confirm			
15.6	Positioning accuracy in Back Gauge per 1000 mm	±0.1 mm			
15.7	Repeatability in Back Gauge (1/2 the positioning accuracy)	Vendor to specify			
15.8	Positioning accuracy over entire traverse in Back Gauge	Vendor to specify			
	Straightness of lower bearing knife surface, Parallelism of back gauge at various positions with reference to lower knife, Deviation of back gauge setting from the displayed reading. Supplier to indicate values for all these parameters to meet DIN 55804, Class I Standards.	Vendor to specify			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
16.0	AMBIENT CONDITIONS & THERMAL STABILITY :				
16.1	Total machine including CNC system and all supplied items should work trouble free and efficiently under following operating conditions and should give specified accuracies Power Supply: Voltage: 415 V + 10% Frequency: 50 Hz + 3%, No. of phases = 3 Ambient Conditions: Temperature = 5 to 45 degree Celsius, Relative Humidity = 95% max. (Vendor to confirm that machine is suitable for above and details of provisions on the machine for the same are to be furnished by Vendor)	Vendor			
16.2	Weather conditions are tropical, Atmosphere may be dust laden during some part of the year. Machine shall be kept in the normal shop floor condition. Max. temperature variation is up to 25 deg Celsius in 24 hours. (Vendor to confirm that machine is suitable for above and details of provisions on the machine for the same are to be furnished by Vendor)	Vendor			
16.3	Thermal Stability of the complete machine keeping in view specified Ambient Conditions and accuracy requirements of BHEL components and trouble free operation of the machine should be ensured by vendor. (Confirm that machine is suitable for above and details of provisions on the machine for the same should be furnished)	Vendor			
17.0	MACHINE ACCEPTANCE: (Tests/Activities should be Performed by Vendor)	Should be accepted & confirmed by Vendor			
17.1	Tests/Activities to be carried out at supplier's works on the machine before despatch in the presence of BHEL Representatives. Test/Complaince Certificates to be furnished.				
17.1.1	Supplier should carry out a Full load test to at the maximum power & cutting capacity of the machine before despatch.				

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
17.1.2	Demonstration of all features of the machine, control system & accessories.				
17.1.3	Positioning accuracies as per VDI-DGQ/3441 (for back gauge)				
1 1/14	The machine should be tested for continuous running of 48 hrs. If any break down occurs during this test, the test should be repeated for 48 hrs from that time.				
17.1.5	Front gauge positioning accuracy as per clause 15.1				
17.1.6	Squareness of cut sheet as per clause 15.4				
17.1.7	Cut sheet to meet tolerances as per DIN 55804, Class I Standards				
17.2	Tests/Activities to be carried out at BHEL works while commissioning the machine:				
1 1/21	Full load test to demonstrate the maximum power & cutting capacity of the machine at BHEL works.				
17.2.2	Demonstration of all features of the machine, control system & accessories to the satisfaction of BHEL for efficient and effective use of the machine				
17.2.3	Positioning accuracies as per VDI-DGQ/3441 (for back gauge)				
1 1 / / / /	The machine should be tested for continuous running of 48 hrs. If any break down occurs during this test, the test should be repeated for 48 hrs from that time.				
17.2.5	Front gauge positioning accuracy as per clause 15.1				
17.2.6	Squareness of cut sheet as per clause 15.4				
17.2.7	Cut sheet to meet tolerances as per DIN 55804, Class I Standards				
17.2.8	Two weeks supervision of independent operation of machine by BHEL after job proveout				

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
17.2.9	Training of BHEL machine operators in operation of complete machine & accessories etc by the supplier's experts / engineers during their stay at BHEL works				
17.2.10	Demostration by actual use of all supplied attachments and accessories to their full capacity.				
18.0	PACKING:				
18.1	Sea worthy & rigid packing for all items of complete machine, CNC System, all Accessories and other supplied items to avoid any damage/loss in transit. When machine is despatched in containers, all small loose items shall be suitably packed in boxes	Vendor			
19.0	GUARANTEE:				
19.1	24 months from the date of acceptance of the machine.	Vendor			
20.0	GENERAL:				
20.1	Machine Model	Vendor			
20.2	Total connected load (KVA):	Vendor			
20.3	Floor area required (Length, Width, Height) for complete machine & accessories	Vendor			
20.4	Painting of Machine / Electrical Panels.	Vendor			
20.5	Total weight of the machine	Vendor			
20.6	Weight of heaviest part of machine	Vendor			
20.7	Weight of the heaviest assembly / sub-assembly of the Machine	Vendor			
20.8	Dimensions of largest part/ sub-assembly/ assembly of the machine	Vendor			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
20.9	Vendor to submit, along with offer, reference list of customers where similar machines have been supplied mentioning broad specifications of the supplied machine i.e. Model, Load Capacity, Max job Envelope, CNC System, Accessories, etc.	Required			
. /!!!!	Detailed catalogues, sketch/ photographs of the m/c and accessories/ attachments should be submitted with the offer.	Required			
20.11	Hydraulic, Pneumatic & oil pipings should be preferably metallic except places where flexible pipings are essential. All the pipes required for the same shall be included in the standard scope of the machine.	Vendor			
20.12	Guarantee & test certificate for all bought out items to be provided along with catalogues and manuals.	Vendor			
21.0	REFERENCE LIST / QUALIFYING CONDITIONS :				
	O1. Only those vendors, who have supplied and commissioned at least three CNC Hydraulic Shearing Machine of same or higher sizes (Power, Load Capacity & Max Job Envelop) for similar applications in the past Five years in India and such machine is presently working satisfactorily for more than three years after commissioning should quote.				
	02. However, if such machine (s) has/had been supplied to BHEL, then such machine should be presently working satisfactorily for more than six months after its commissioning and acceptance in BHEL should quote.				
	03. The vendor shall be an Original Equipment Manufacturer (OEM). Only the OEM or their authorized dealers in India along with an authorization letter can submit offers. An authorized Representative/Dealer in India, cannot quote for the same equipment from more than one OEM.	Vendor			
	04. Offer shall be for a new equipment and not for any refurbished / used equipment. All the parts used in the equipment shall also be new and not used / refurbished ones. A declaration to the above effect has to be furnished.				
	05. Foreign OEM shall have Authorized Indian dealer(s) / representative(s) for				

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
	After- sales service and support. The authorization letter for the dealer/ representative shall be provided with confirmation that after sales service support shall be provided by them.				
	06. The vendor or their authorized service representatives shall have trained engineers in India for commissioning & service for the offered equipment and shall be in a position to provide prompt after sales service and spares support for our installations.				
	07. The vendor shall be in a position to undertake AMC or provide service support for the equipment supplied, after the expiry of the warranty/ guarantee period either directly or through a service representative.				
	08. If required by BHEL, the vendor shall arrange for a demonstration of the equipment or similar equipment operating in India.				
	09. Vendors Should be an ISO 9000 & ISO 14000 Certification.				
21.1	Pre-qualification will be carried out based on the details furnished by the vendor / feedback from their customers / inspection of the company / product if required by BHEL and at its sole discretion.				
	The Pre-qualification criteria are mandatory requirements and the technical bids will be evaluated only when the Pre-Qualification criteria are met.				
	Vendor should already have an established office in Bangalore City with trained personnel for providing prompt service backup. Necessary Documents for establishing the same to be submitted with the offer. This is required from all the vendors for qualification of their offer.				
	The following information should be submitted by the vendor about the companies where similar machines have been supplied.				

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
1	. Name of the customer / company where similar machine is installed.	Vendor			
2	2. Complete postal address of the customer.	Vendor			
3	3. Year of commissioning.	Vendor			
4	I. Application for which the machine is supplied	Vendor			
5	5. Name and designation of the contact person of the customer.	Vendor			
E	5. Phone, FAX no. and email address of the contact person of the customer.	Vendor			
	7. Performance certificate from the customers regarding satisfactory performance of machine supplied to them	Vendor			



Bharat Heavy Electricals Ltd.,

(A Government of India undertaking)

Electronics Division

PB No.2606, Mysore Road, Bangalore-560026, India

Enquiry - General Terms & Conditions for Supply of CAPITAL ITEMS

(Imported & Indigenous) (Two parts bid),

Doc Ref: CPD-20000

I. Enquiry / Request For Quotation (RFQ):

- (a) Any Purchase Order resulting from this enquiry shall be governed by these general terms and conditions listed below and special terms and conditions, if any, along with this enquiry of Bharat Heavy Electricals Limited, Electronics Division, Bangalore-560026 (hereinafter referred to as BHEL EDN).
- (b) Any of the terms and conditions not acceptable to vendor, shall be explicitly mentioned in the quotation. Otherwise, it will be treated as that all terms and conditions of this enquiry are acceptable.
- (c) If counter terms and conditions are offered by vendor, BHEL EDN shall not be governed by such terms and conditions, unless it is agreed and incorporated in the Purchase Order of BHEL EDN.
- (d) Any deviation to the terms and conditions not mentioned in the quotation by vendor in response to this enquiry will not be considered, if put forth subsequently or after issue of order, unless clarification is sought for by BHEL EDN and agreed upon in the Purchase Order of BHEL EDN.
- (e) BHEL EDN reserves the right to adopt Reverse Auction for the enquiry sent, at its discretion.
- (f) BHEL EDN shall be at liberty to cancel the tender at any time, before ordering, without assigning any reason.

II. General Terms and conditions:

1. TWO PARTS BID: Quotation shall be submitted in two parts bid i.e.

(a) <u>Techno-commercial i.e., Un-priced Bid (in one sealed envelope):</u>

Techno-commercial bid shall be submitted with complete description of the equipment, specification compliances to the enquired specification and all the commercial terms & conditions indicated in the **COMMERCIAL TERMS** (ANNEXURE - A / ANNEXURE - B). Any other enclosure, which the vendor wishes to submit like product catalogue, technical literature etc., may also be submitted in a sealed envelope super scribed clearly as "**TECHNO-COMMERCIAL BID**" with **RFQ No. and DUE DATE**. An un-priced copy of price bid (without price) shall also be enclosed with the techno-commercial bid for evaluation of commercial terms. The vendor shall not give the price in the technical bid.

Confirmation to BHEL specifications shall be indicated by the vendor in the respective columns provided in the purchase specification wherever applicable. Deviations to the specification /



item description, if any shall be brought out clearly indicating "DEVIATION TO BHEL SPECIFICATION" without fail as a part of technical offer.

Compliance to Pre-qualification criteria (if applicable) shall also be enclosed with the Technocommercial bid.

Manufacturer's name, their trade mark and brand, part number, alternate material to the one asked in enquiry, if any, should be mentioned in quotation and illustrative leaflets giving technical particulars etc. are to be attached to facilitate consideration and technical evaluation of the quotation.

BHEL EDN material code number (as in enquiry) shall be indicated for each item quoted.

(b) Price Bid (in one sealed envelope):

Price bid should contain basic unit prices, discount if any, applicable taxes & duties, packing & forwarding charges (if applicable), Freight & insurances (if applicable) FOB charge (if applicable) etc., in a sealed envelope super scribed clearly as "PRICE BID" with RFQ No. and DUE DATE. Installation, commissioning, start-up and training charges (if any) shall also be indicated in the price bid.

It is preferred to indicate the rates in both figures and words. In such case, if there is difference / discrepancy between the rates in figures and words, the **least of the two** rates will be considered.

(c) <u>Tender Offer (above two envelopes inside another sealed envelope):</u>

Both these sealed envelopes [(a) Techno-commercial i.e., un-priced Bid and (b) Price Bids] shall be kept in a single sealed envelope and super scribed clearly with **RFQ No. and DUE DATE.**

2. The above sealed envelope (Tender) shall reach our office on or before the due date by 13:00 hrs. Quotations are to be dropped in the tender box marked for the OPENING ON respective days i.e., MONDAY / WEDNESDAY / FRIDAY kept at BHEL-EDN's Reception area of our works with caption "CE, M&C, SC&PV, TSC, DEFENCE, TELECOM, CPD". Quotations also can be dispatched by Couriers / Registered post / FAX / e-mail to the Purchase Executive indicated in the RFQ at the risk of vendor / bidder.

Quotation through courier / register post / fax / email when addressed to the specific fax number and email address given in the enquiry, to be sent well in advance to enable BHEL EDN purchase personnel to drop in the tender box before the scheduled opening date and time. Vendor is fully responsible for lack of secrecy on information of such quotations. Vendor shall confirm with the concerned purchase executive after sending the offer regarding such delivery mode to ensure participation. BHEL EDN is not responsible for any delay in receipt of quotation sent by vendor through post/fax/email.

Late Tenders i.e., Tenders received after due date will be rejected.



- **3.** The rate quoted against each item shall be in units stated in the enquiry. Where quotation is in terms of unit other than that in enquiry, relationship between the two units must be furnished in the quotation.
- **4.** As far as possible, the quotations shall be free from corrections / overwriting. Corrections / overwriting, if any should be signed by authorized person with the company seal. Any typographical errors, totaling mistakes, currency mistakes, multiplication mistakes, summary mistakes observed in your priced bids, BHEL may consider whichever is beneficial to BHEL for evaluation. Vendor shall doubly ensure that the quote is correct and complete. The corrections / overwriting if any shall be signed with the seal.
- **5.** Quotations are to be duly signed. Unsigned bids / offers are liable for rejection.
- **6.** Tenders will be opened at **13:30 hrs.** & the venue is New Engg., Bldg., 2nd floor, MM conference hall. All the tenderers or their authorized representatives (with authorization letter from their principals) may witness opening of techno-commercial bid on the due date.
- **7.** After evaluation of techno-commercial bids, price bids of only those which are technically & commercially accepted, will be opened on a subsequent date, which will be intimated to the concerned in advance for witnessing of price bid opening.
- **8.** The quantity in each item to be purchased may vary from quantity enquired according to the actual requirement at the time of placing the purchase order. Quantity discount, if any, should be mentioned in the quotation.
- 9. BIDDERS (for indigenous purchase) shall indicate clearly Excise duty, Education Cess, Sales Tax/VAT, Octroi, Exit/Entry tax, Service Tax as applicable for the quoted items. In the absence of clarity of these, any claim at a later date will not be entertained. Any changes in Taxes and duties after award of the contract will not be considered except such are those, which are imposed by Govt., notification within the contractual delivery after placement of PO. Seeking price amendments for change in Excise duty due to crossing of turnover limits will not be considered under any circumstances.

10. DUN & BRADSTREET REPORT (for Foreign purchase):

In case of foreign vendors, the vendors should obtain a report from Dun & Bradstreet or equivalent and submit a copy of the report with their Duns number mentioned along with the technical offer. Offer without this report is liable for rejection.

11. Payment of Agency Commission to Indian Agent (for Foreign purchase):

The vendor shall give a certification to the following effect:

The seller confirms and declares to the Buyer that the seller is the original manufacturer of the stores referred to in this contract and has not engaged any individual or firm, whether Indian or Foreign whatsoever, to intercede, facilitate or in any way to recommend to the Government of India or any of its functionaries, whether officially or unofficially, to the award of the contract to the seller; nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The seller agrees that if it is any way incorrect or if at a later stage it is discovered by the Buyer that the seller has engaged any such individual/ firm, and paid or intended to pay any amount, gift,



reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this contract, the seller will be liable to refund that amount to the Buyer. The seller will also be debarred from entering into any supply contract with the Government of India for a minimum period of five years. The Buyer will also have a right to consider cancellation of the contract either wholly or in part, without any entitlement or compensation to the seller who shall in such event be liable to refund all payments made by the buyer in terms of the contract along with interest at the rate of 2% per annum above the LIBOR rate. The Buyer will also have the right to recover any such amount from any contracts concluded earlier with the Govt. of India

BHEL would like to procure the above item directly from you and not to involve services of Indian Agent for the procurement. The quotation submitted by your Indian Agent is not acceptable and liable to be rejected. However, in case you would like to involve your Indian Agent for supply of the items/service therefore you may furnish the following information along with the Techno Commercial bid.

- (a) Registration status of Indian Agent with DGS&D and BHEL.
- (b) Commission payable to Indian Agent and percentage.
- (c) Currency in which payable to Indian Agent.
- (d) If the agency commission is payable by the foreign principal/OEM, such commission shall be received by Indian Agent through inward FFE remittance through banking channels and disbursed in rupees only.
- (e) Tax at source deduction is applicable to the Agency Commission paid to the Indian Agent as per the prevailing rules.
- (f) If the respective Indian Agents are not registered with DGS&D or BHEL, are required to register their names with BHEL by providing the following information's for registration.
 - (i) Name of the foreign firm / original equipment manufacturer represented by the Indian representative / Indian Agent.
 - (ii) Agency agreement.
 - (iii) PAN No, Name, Address of Bankers in India and Abroad.
 - (iv) Nature of services to be rendered by Indian Agent / Indian representative and percentage of commission payable to Indian Agent / Indian representative by Principal / original equipment manufacturer.
- (g) All particulars relating to Agency Commission will be reported to the enforcement Directorate of Income Tax Department.
- (h) Undertaking to be submitted by Indian Representative / Agent that the agency commission would be accepted in Indian Rupees only and through inward FFG remittance through banking channel for the services rendered towards the execution of the orders.



12. <u>TOTAL COST TO BHEL:</u> Purchase order will be placed on the lowest quotation (L1) only among the technically & commercially accepted quotations. Lowest quotation (L1) is determined on the basis of the total cost to BHEL.

(a) FOR FOREIGN PURCHASE:

Total cost to BHEL = Total basic value (including installation, commissioning, training, spares etc.) in foreign currency + FOB charges (if any) + Packing & Forwarding charges (if any) + Cost Insurance Freight (CIF) + Basic Custom Duty (BCD) + Counter Veiling Duty (CVD) + Educational Cess + Special Additional Duty (SAD) + Entry TAX + Service TAX (if applicable) + Loading factors for deviations to commercial terms & conditions.

Note: Exchange rate ruling on the date of Tender opening (Techno-commercial / un-priced Bid) will be considered for converting foreign currency to Indian currency. Exchange rates of banking TT selling will be considered.

No import license will be given by BHEL EDN unless otherwise specifically stated.

(b) FOR INDIGENOUS PURCHASE:

Total cost to BHEL = Total basic value (including installation, commissioning, training, spares etc.) + Packing & forwarding charges + Excise duty + Education cess + sales Tax/VAT + Octroi + Exit/Entry tax + Freight & Insurance + Service Tax (if applicable) + Loading factors for deviations to commercial terms & conditions.

13. FIRM PRICE: Rates quoted should be firm from the date of P.O., to the completion of supply and no enhancement in the rates and changes in the techno-commercial terms will be allowed once the quotation is accepted and order is placed.

If Installation & Commissioning is in vendor's scope, then the price shall remain FIRM till commissioning & handing over of the complete system.

14. TERMS OF PAYMENT:

(a) FOR FOREIGN PURCHASE:

Payment will be made against "SIGHT DRAFT" on presentation of documents to our bankers. Payment through LC is also made subject to loading factors as per Clause 27 (Ai). For LC payment bank charges within India will be borne by BHEL and outside India will be to vendor's account.

The payment terms are as follows:

- (i) 100% against complete dispatch documents i.e. AWB / BOL, Invoice, Packing list, Warranty certificate (if applicable), Nil shortage certificate, Certificate of country of origin etc., (where both commissioning & PBG are NOT applicable).
- (ii) 90% against complete dispatch documents i.e. AWB / BOL, Invoice, Packing list, Warranty certificate, Nil shortage certificate, Certificate of country of origin etc., & balance 10 % on submission of Performance Bank Guarantee (PBG) (where PBG only is applicable).
- (iii) 80% against complete dispatch documents i.e. AWB / BOL, Invoice, Packing list, Warranty certificate, Nil shortage certificate, Certificate of country of origin etc., 10% after completion of commissioning & balance 10 % on submission of Performance Bank Guarantee (PBG) (where both commissioning & PBG are applicable).



(iv) If PBG could not be submitted, vendors can also accept for the final 10% payment, payable after the warranty period + 6 months of claim period against supplementary invoice subject to the completion of commissioning (if applicable). In such cases loading for PBG is not applicable.

(b) FOR INDIGENOUS PURCHASE:

- (i) 100% payment with 30 days credit (where both commissioning & PBG are NOT applicable).
- (ii) 90% basic payment + 100% taxes & duties with 30 days credit & balance 10% basic against submission of PBG (where PBG only is applicable).
- (iii) 80% basic payment + 100% taxes & duties with 30 days credit 10% basic after completion of commissioning & balance 10% basic against submission of PBG (where both commissioning & PBG are applicable).
- (iv) If PBG could not be submitted, vendors can also accept for the final 10% payment, payable after the warranty period + 6 months of claim period against supplementary invoice subject to the completion of commissioning (if applicable). In such cases loading for PBG is not applicable.
- 15. <u>ADVANCE PAYMENT:</u> Quotations with "Advance payment" without fully securing with equal value of BG is liable for rejection. "Inland Letter of Credit" is not encouraged.
- 16. <u>PENALTY:</u> Failure to supply within the delivery time as per purchase order will make the vendor liable to an unconditional penalty of 0.5 % (half percent) per week at the basic price of the goods for the undelivered quantity, subject to a maximum of 10%.

If pre-shipment inspection is involved, date of issue of pre-shipment call by the vendor along with test certificates / test reports / certificate of conformance / calibration reports as proof of completion will be treated as date of dispatch for the purpose of penalty calculation.

In the absence of reports stated above, actual date of inspection will be considered as date of dispatch for penalty calculation.

Date of receipt / Date of dispatch / Date of LR / Date of Airway bill / Date of pre-shipment inspection call with relevant documents as stated above, whichever is applicable shall be considered as delivery date for the purpose of penalty calculation. BHEL is not liable for delayed OA for opening LC or corrections/amendment to LC asked after opening of LC.

17. <u>PBG:</u> Performance Bank Guarantee (PBG) to be submitted on Rs.100/- non-judicial stamp paper as per the BHEL prescribed format given in **ANNEXURE - E / ANNEXURE - F** for 10% of the basic equipment value obtained from any BHEL member (consortium) banks indicated in **ANNEXURE-G**.

PBG shall be valid for 12 months from the date of commissioning or 18 months from the date of dispatch whichever is earlier. The PBG shall also have 6 months claim period from the date of dispatch / commissioning.



The Bank Guarantee shall be submitted directly to the concerned Purchase Executive by the issuing Bank with their forwarding letter. BHEL will verify independently with the bank to establish the authenticity.

18. <u>WARRANTY:</u> Goods dispatched shall have warranty period of 18 months from the date of dispatch or 12 months from the date of commissioning whichever is earlier or as mentioned in the RFQ.

19. TERMS OF DELIVERY:

(a) FOR IMPORTED PURCHASE:

Price offered shall be for goods packed and delivered **F.O.B.** (named international Airport / sea port) including packing, forwarding, Handling, Ancillary charges like processing of Sight Draft, Letter of credit (L/C) if applicable, negotiation of bank documents, Export declaration, Certificate of origin etc.

Packing shall be Road / Rail / Air / Sea worthy, best suitable for transshipment and to take care of transit damages. If containerized, no. of containers & size of container shall be mentioned. Packing weight (gross & nett) Packing dimensions shall be given prior to shipment to ascertain whether the consignment can be carried on standard cargo in contract or as ODC.

Wooden packing material for all the foreign consignments should be treated as per ISPM-15 & **Fumigation / Phytosanitary certificate** to be submitted to the freight forwarders / BHEL along with the invoice, AWB, packing list etc.

Vendors shall indicate the name of International Airport/ Seaport. The consignment shall be handed over to BHEL approved freight forwarded as mentioned in PO.

Note: Name of International Airport has to be selected from any one of the airports indicated in the table provided in **ANNEXURE – C.**

(b) FOR INDIGENOUS PURCHASE:

Equipment shall be delivered on EX-EDN/BHEL, Bangalore basis, inclusive of freight, packing, insurance & forwarding charges.

Packing shall be Road / Rail / Air / Sea worthy, best suitable for transshipment and to take care of transit damages.

It is preferred to dispatch the consignments through EDN/BHEL approved transporters indicated in **ANNEXURE - D** on Door Delivery basis.

Smaller consignments can be dispatched through Courier services / RPP with the prior approval of the purchasing Executive.

In case of ex-works dispatches, transit insurance shall be arranged by BHEL. Vendor shall intimate the dispatch details to BHEL immediately after effecting shipment, to arrange transit insurance accordingly.



- **20. <u>DELIVERY REQUIREMENT:</u>** In the quotation, earliest firm delivery (number of days or weeks) by which material will be dispatched from the date of Purchase order must be indicated. It is recommended to avoid Quotations with delivery term such as `ex-stock', `subject to prior sale', or `delivery at the earliest'. Date of BHEL PO is the reference for all purposes.
- **21.** <u>VALIDITY:</u> Quotation should remain valid for a period of **90 days** from the date of technical bid opening. Offer with Non-conformance is liable for rejection.

22. POST-ORDER REQUISITES:

- (a) Vendor shall give an Order Acknowledgement indicating the delivery date within one week of receipt of PO.
- **(b)** Pre-shipment inspection at vendor's works, if required, will be carried out by BHEL. Required assistance will have to be provided by the vendor at the time of pre-shipment inspection.
- **(c)** Test certificates, Calibration certificates and warranty certificates as stipulated at the time of ordering shall be furnished.
- (d) Items shall be dispatched by Air/Road/Rail/Sea worthy packing. Any damage and later rejection, due to poor / improper packing shall be to vendor's account.
- **(e)** Any damage/rejection should be made good or replaced immediately without any extra cost to BHEL such as freight, duties, taxes etc. The liability is restricted to the value of the order.
- (f) Wherever commissioning is involved, it shall be carried out by the vendor's qualified engineers. Scope of work includes installation, commissioning and start-up trials till satisfactory performance level is reached as certified by BHEL.
- (g) BHEL will not be responsible for any loss, damage or injuries to vendor's personnel sustained during installation / commissioning / start-up trials. Vendor shall ensure compliance with all statutory requisites as laid down by local bodies, state & Central Government. Vendor shall indemnify BHEL for all damages/ losses to various personnel during their presence in BHEL's premises for whatever purpose.
- (h) Suitable markings & damage control indicating devices shall be provided where applicable.
- 23. Equipment shall comply with the standard requirements of ISO 14001 & OHSAS 18001.

24. GENERAL TERMS AND CONDTITIONS GOVERNING REVERSE AUCTION (RA):

- (a) 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 ON INTERNET. For the proposed RA, technically and commercially acceptable bidders only shall be eligible to participate.
- **(b)** In case of RA, BHEL will engage the services of a service provider for conduct of the RA who will provide all necessary training and assistance to the bidders before commencement of on line bidding on internet.



- **(c)** Business rules governing the RA will be communicated to the bidders through service provider for compliance.
- (d) Vendors have to fax the Compliance form in the prescribed format (provided by Service provider) before start of RA. Without the compliance, the vendor will not be eligible to participate in the event.
- (e) BHEL will provide a sample calculation sheet (in EXCEL format) which would help the bidders to arrive at "Net Cash outflow to BHEL" considering various price / cost elements 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) etc. for each of the bidders to enable them to arrive at "Net Cash outflow to BHEL (Total Cost to BHEL)" which is the amount the bidder would be bidding during the RA.
- (f) RA will be conducted on scheduled date & time and at the end of event, the lowest bidder value will be known on the network.
- **(g)** The lowest bidder has to Fax the duly signed "Price Break-up" in prescribed format as provided on case-to-case basis to BHEL through Service provider within 24 hours of Auction without fail.
- **(h)** 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 further business with BHEL, as per the prevailing procedure.
- **25.** <u>REGRET LETTER:</u> In case any vendor is unable to quote, vendor shall send a regret letter without fail. In case of non-receipt of quotations or regret letters for three consecutive enquiries, such vendor is liable to be removed from our vendor list.
- **26.** Any dispute arising out of this, shall be referred to the sole arbitration of Head of Dept. Materials Management of group concerned, BHEL EDN or any other officer nominated by him and his award shall be final and binding on the parties. The venue of the arbitration in all cases shall be Bangalore.
- 27. Any legal suit in respect of this enquiry lies in the court of Jurisdiction of Bangalore (India) only.

28. LOADING FACTORS:

Loading factors as detailed below will be added to the quoted price (basic) to evaluate the lowest quote for non compliance of BHEL standard commercial terms.

A(i). For non compliance of standard Terms of payment (For Foreign Purchase Orders)

SI.	BHEL standard term	If you quote	Loading factor in % for non-
No.			compliance
1	100% against "SIGHT DRAFT"	Payment through	10 % x Percentage quoted
	on presentation of dispatch	Letter of Credit (LC)	through LC
	documents to our Bankers	with bank charges to	
	(where both commissioning &	respective accounts	
	PBG are not applicable).		



	2	90% against "SIGHT DRAFT" + 10% against PBG (where PBG only is applicable)	Payment through Letter of Credit (LC) with bank charges to respective accounts	10 % x Percentage quoted through LC
•	3	80% against "SIGHT DRAFT" + 10% after commissioning +10% against PBG (where both commissioning & PBG are applicable)	Payment through Letter of Credit (LC) with bank charges to respective accounts	10 % x Percentage quoted through LC

A(ii). For non compliance of standard Terms of payment (For Indigenous Purchase Orders)

SI.	BHEL standard term	If you quote	Loading factor in % for non-
No.			compliance
1	100% payment with 30 days	Payment through bank	10 % x percentage quoted
	credit (where both commissioning		through bank / proforma invoice
	& PBG are not applicable).	Payment against	
		proforma invoice	
2	90% basic payment + 100%	Payment through bank	10 % x percentage quoted
	taxes & duties with 30 days credit		through bank / proforma invoice
	+ 10% against PBG (where PBG	Payment against	
	only is applicable)	proforma invoice	
		100% with 30 days	Nil
		credit & against	
		submission of PBG	
3	80% basic payment + 100%	Payment through bank	10 % x percentage quoted
	taxes & duties with 30 days credit		through bank / proforma invoice
	+ 10% after commissioning +10%	Payment against	
	against PBG (where both	proforma invoice	
	commissioning & PBG are	100% with 30 days	Nil
	applicable)	credit after	
		commissioning &	
		submission of PBG	

B. For non compliance of Penalty clause for delayed delivery:

SI. No.	BHEL standard term	If you quote	Loading factor for non- compliance
1	Penalty of 0.5% per week subject to max. of 10% on the	Not agreed.	10 %
	basic value of the items not supplied /delayed	5% max., agreed.	5%
		Other than the above.	10% - (minus) agreed max. %



C. For non compliance of Performance Bank Guarantee (PBG):

SI. No.	BHEL standard term	If you quote	Loading factor for non- compliance
1	PBG for 10% of the basic material cost shall be furnished	Not agreed.	10 %
	in the BHEL prescribed format.	5% agreed.	5 %
		Other than the above.	10% - (minus) agreed max. %

D. For non conformance to delivery requirement indicated in the RFQ:

SI. No.	BHEL standard term	If you quote	Loading factor for non- compliance
1	Delivery requirement as indicated in the RFQ in number of weeks from the date of issue of PO	Not agreed for the stipulated delivery in the RFQ	0.5 % per week up to max., of 10% for the difference in delivery period

E. For non compliance of Warranty:

SI. No.	BHEL standard term	If you quote	Loading factor for non- compliance
1	18 months from the date of dispatch or 12 months from the	Not agreed.	6%
	date of commissioning whichever is earlier or as indicated in the RFQ	Less than 12 months or as indicated in the RFQ	0.5 % per month for the difference in period

F (i) For Non- agreement on delivery at BHEL-EDN (For Foreign Purchase Orders):

SI. No.	BHEL standard term	If you quote	Loading factor for non- compliance
1	FOB / CIF to nearest	Not agreed for the	10 %
	international Airport/Seaport	standard term of	
		delivery	

F(ii) For Non- agreement on delivery at BHEL-EDN (For Indigenous Purchase Orders):

SI.	BHEL standard term	If you quote	Loading factor for non-
No.			compliance
1	Ex-EDN/BHEL, Bangalore (Free delivery to EDN/BHEL Bangalore including freight, packing & forwarding charges)	Not agreed for the standard term of delivery	10 %



ANNEXURE - A

COMMERCIAL TERMS (to be enclosed with TECHNO-COMMERCIAL BID)

(for Foreign Purchase Orders)

SI. No.	Particulars	Bidder's confirmation
1	Price basis: Firm i.e., from the date of PO to completion of supply [Price Variation Clause (PVC) not acceptable]	Acceptable / Not acceptable
2	Terms of Payment: Against "SIGHT DRAFT" on presentation of documents to our bankers. (a) 100% is payable on negotiation of complete set of original documents (where commissioning & PBG are not applicable) (b) 90 % is payable on negotiation of complete set of original documents & balance 10% against submission of PBG (where PBG only is applicable).	(a) Acceptable / Not acceptable (b) Acceptable / Not acceptable
	(c) 80 % is payable on negotiation of complete set of original documents, 10% after commissioning & balance 10% against submission of PBG (where both Commissioning & PBG are applicable).(d) Deviation if any please specify Note: Refer clause 14 (a) above	(c) Acceptable / Not acceptable
3	BHEL's penalty clause: (a) Delay in delivery as per PO delivery date will result in penalty of 0.5 % per week subject to maximum of 10% on the value of the items not vendor/delayed. (b) Deviation if any Please specify	(a) Acceptable / Not acceptable (b)
.4	Performance Bank guarantee: PBG for 10% of the basic material cost shall be furnished in the BHEL prescribed format as detailed in clause 17.	Yes / No
5	Terms of delivery: (a) F.O.B international Airport/Seaport as per clause 19 (a) (Indicate name of International Airport/Seaport) (b) Deviation if any Please specify	(a) Acceptable / Not acceptable (b)
6	Warranty: (a) 18 months from the date of dispatch or 12 months from the date of commissioning (b) Deviation if any Please specify	(a) Acceptable / Not acceptable (b)
7	Delivery period: Indicate number of weeks from the date of issue of Purchase order	Weeks
8	Validity: (a) Quotation should remain valid for a period of 90 days from the due date	(a) Acceptable / Not acceptable
	(b) Deviation if any Please specify	(b)
9	Bank charges (If applicable): (a) Bank charges within India is to BHEL account and outside India is to Vendor's account	(a) Acceptable / Not acceptable
	(b) Deviation if any Please specify	(b)
10	Weight and Dimension of consignment with packing	Furnished / To be furnished



ANNEXURE - B

COMMERCIAL TERMS (to be enclosed with TECHNO-COMMERCIAL BID) (For Indigenous Purchase Orders)

SI. No.	Particulars	Bidder's confirmation
1	Price basis: Firm i.e., from the date of PO to completion of supply	Acceptable / Not acceptable
	[Price Variation Clause (PVC) not acceptable]	
2	Excise duty:	Applicable / Not applicable
	If applicable indicate %.	ED:%
3	Sale tax:	Applicable / Not applicable
	If applicable indicate %	(a) VAT%
		(b) CST% against form C
4	Payment terms:	
	(a) 100% payment with 30 days credit(where commissioning &	(a) Acceptable / Not acceptable
	PBG are not applicable)	4
	(b) 90 % basic payment + 100% taxes, duties & freight charges	(b) Acceptable / Not acceptable
	with 30 days credit & balance 10% against submission of PBG	
	(where PBG only is applicable)	(c) Acceptable / Not acceptable
	(c) 80 % basic payment + 100% taxes, duties & freight charges with 30 days credit, 10% after commissioning & balance 10%	(b) / toocptable / 140t doocptable
	against submission of PBG (where both commissioning & PBG	
	are applicable)	
	(d) Deviation if any please specify	(d)
	Note: As per clause 14 (b)	
5	BHEL's penalty clause:	
	(a) Delay in delivery as per PO delivery date will result in	(a) Acceptable / Not acceptable
	penalty of 0.5 % per week subject to maximum of 10% on the basic value of the items not vendor/delayed.	
	(b) Deviation if any Please specify	(b)
6	Performance Bank guarantee (PBG):	Yes / No
0	PBG for 10% of the basic material cost shall be furnished in the	Tes / No
	BHEL prescribed format as per clause 17.	
7	Terms of delivery:	
'	(a) Ex EDN / BHEL, Bangalore (Free delivery to EDN/BHEL	(a) Acceptable / Not acceptable
	Bangalore including freight, packing & forwarding charges)	(d) / toooptable / Not doooptable
	(b) Deviation if any Please specify	(b)
0	Wowenty	
8	Warranty: (a) 18 months from the date of dispatch or 12 months from the	(a) Acceptable / Not acceptable
	date of commissioning	(a) Acceptable / Not acceptable
	(b) Deviation if any Please specify	(b)
9	Delivery period: Indicate number of weeks from the date of	Weeks
	issue of Purchase order	
10	Validity:	
	(a) Quotation should remain valid for a period of 90 days from	(a) Acceptable / Not acceptable
	the due date	(6)
	(b) Deviation if any Please specify	(b)
11	Bank charges (If applicable):	
	(a) All Bank charges to vendor's account	(a) Acceptable / Not acceptable
	(b) Deviation if any Please specify	(b)
12	Weight and Dimension of consignment with packing	Furnished / To be furnished
	5	



ANNEXURE - C

LIST OF INTERNATIONAL AIRPORTS

SI. No	Country	Air Ports
1	Austria	Vienna, Linz, Graz
2	Australia	Sydney, Melbourne, Perth
3	Belgium	Antwerp, Brussels
4	Canada	Toronto, Montreal
5	China	Shangai
6	Cyprus	Lamaca
7	Czech Republic	Prague (Via Frankfurt)
8	Denmark	Copenhagen
9	Egypt	Cairo
10	Finland	Helsinki
11	France	Paris (Rossy), Lyon
12	Germany	Darmstadt, Manihiem, Nurnberg, Hamburg, Stutttgart, Munich, Koln, Dusseldorf & Hannover, Frankfurt, Berlin
13	Hongkong	Hongkong
14	Italy	Rome, Milan, Turin, Bologna, Florence
15	Ireland	Dublin
16	Isrel	Telaviv
17	Japan	Tokyo, Osaka
18	Malaysia	Kaulalampur, Penang
19	Neatherlands	Amsterdam, Rotterdam
20	Newzealand	Auckland
21	Norway	Oslo
22	Oman	Muscat
23	Philiphines	Manila
24	Romania	Bucharest
25	Russia	Moscow
26	Saudi Arabia	Riyad
27	Singapore	Singapore
28	Slovakia	Bartislowa
29	South Africa	Johannesburg, Durban
30	South korea	Kimpo
31	Spain	Barcelona
32	Sweden	Stockholm, Gothenburg, Milano
33	Switzerland	Basle, Zurich, Geneva
34	Taiwan	Taipei
35	U.A.E.	Dubai
36	U.K.	Landon (Heathrow), Newcastle, Oxford, Cheltham, Bristol, Wellingborough, Birmingham, East Midland, Manchester, Leeds, Glasgow.
37	U.S.A.	Newyork, Chicago, Sanfrancisco, Los Angeles, Atlanta
38	Ukraine	Kiev

ANNEXURE-D

BHEL EDN APPROVED TRANSPORTERS FOR INLAND ROAD TRANSPORTATION

- 1. M/s Awagaman Road Carriers ltd., Bangalore. (AWG)
- 2. M/s BLR India pvt., ltd., Bangalore. (BLR)
- 3. M/s Delhi Assam Roadways corporation ltd., Bangalore. (DRL)
- 4. M/s Indo Arya Central transport ltd., Bangalore. (IACT)
- 5. M/s Prakash parcel Services, Bangalore. (PPS)
- 6. M/s Road Carrier of India, Bangalore. (RCI)
- 7. M/s Union Roadways Itd., Bangalore. (URL)



ANNEXURE-E

PERFORMANCE BANK GUARANTEE (FOR FOREIGN PURCHASE ORDERS)

BANK NAME AND ADDRESS

Bharat Heavy Electricals Limited (BHEL), Electronics Division, PB No. 2606, Mysore Road, BANGALORE- 560 026 INDIA

Dear Sir,

Ref: CONTRACT PERFORMANCE GUARANTEE.

/ 1	WHEREAS you have entered into a contract reference No PO NO with M/s							
VVF	HEREAS you r	nave en	itered into a	a contract refere	ence No PO N having	U	registered	with M/s office
at				for the supply o	f Having	แอ	registered	as
det	ailed in your	purcha	se order N	0	v	vhich is he		rred to as
"th	e said contrac	ct" and	WHEREAS	S M/s				
has	s undertaken t	o produ	ice a Bank	Guarantee for	10% (Ten Pe	rcent) of	the con	tract price
am	ounting		to	_			(
				secure its oblig				
				the performanc				•
equ	uipment	SU	ippiiea,	We hereb	ovpreselv	irrovoook		Bank
,	dertake a				incipal ol			
M/s				that i				
				that M/s				
				ntractual obligati				
and				y Electricals Ltd				
260	06, Bangalo	ore-560	026,	India an	amount	of		
			-1) :	subject to
as	may be detern	ninea b	elow:					
1)	Notwithstandi	ng anv	right M/s				may hav	e directly
٠,	against	vou	or	any	disputes	raised	d by	•
				-		Your writt	en demand	shall be
	conclusive ev	idence	to us that re	epayment is due	e under the te	rms of the	said contract	and shall
	be binding on	us.						
٠,								
2)				or released fro				e by any
				between you d Knowledge o				os of M/s
	WILLI OF WILLIO			by any forbeara				
	or otherwise.			by any lorboard	ando whomon	ao to payii	ioni, iimo, poi	nomanoc
3)	This guarante	e shal	I remain va	alid until the er	nd of twenty-fo	our weeks	after the clo	se of the
	warranty perio	od or ur	ntil the same	e is reported by	BHEL to us w	hichever is	earlier.	

4) We agree and undertake not to revoke this guarantee during its validity unless discharged in

writing by you subject to the provision of clause (7) below.



5)	discharge		e shall be by any		ng guarantee in the 	•		•	g and shal Bank o	
6)	This guar	rantee	shall be go	overned by	and construc	ted in acc	ordance	with the	e Laws of Ir	ndia.
7)	At any tii paying	me to	Bharat	Heavy	Bank Electricals	•	der this the	guarant full	ee null and amount	void by being words
									nd on behalf authorised S	

Note:

- (1) To be executed in INR 100 Non-Judicial stamp paper by any authorized Indian Bank.
- (2) To be submitted directly by banker to concerned executive in purchase dept., Please give BHEL address to banker.
- (3) Do not enclose with Bank document.
- (4) Any Modification & omissions to this are not permitted



ANNEXURE - F

<u>PERFORMANCE BANK GUARANTEE</u> (FOR INDIGENOUS PURCHASE ORDERS)

Cor trar hav its Sri.	(year), by the (Bank), registered under the mpanies Act 1956/Nationalised Bank constituted under the Banking Companies (acquisition and nafer of undertakings) Act constituted under the State Bank of India Act / Subsidiary Banks Act, ving its registered / head office at represented herein by Branch Manager / authorised representative Sri & (Hereinafter called 'guarantor ' which term shall mean and include successors and assigns)
	IN FAVOUR OF BHARAT HEAVY ELECTRICALS LIMITED
anc	(Buyer's Name), a company registered under the npanies Act, 1956 having its registered office at BHEL House at Siri Fort, New Delhi-100 049 d its Electronics Division at Mysore road, Bangalore-26 (hereinafter referred to as the 'Company' lich term shall include its successors and assigns):
Wh	ereas the company has placed an order on (State the name of the
incl	npany / firm and its address) (hereinafter referred to as the 'Supplier' which term shall mean and lude its liquidators, successors and assign) for the supply of system under order / Contract
	D WHEREAS the supplier has agreed to supply the materials and carryout the works as detailed in accordance with the terms set out in the said order/contract.
ren sati / co Gua whi / S	D WHEREAS the company is not required to pay to the supplier a sum of Rupees being the 10% of the value of the goods supplied / Works performed / Services dered under the said order / contract between the supplier and the company, till the company is isfied with the mechanical Warranties and the performance standards stipulated in the said order ontract between the company and the supplier has been duly fulfilled, except against a Bank arantee for the said sum of Rs in favour of the company by reputed Bank, in ich case the company has agreed to make payment to the supplier of the said sum of Rupees being (%) of the value of the goods supplied / Works performed services rendered under the agreement between the supplier and the company and the arantor has at the request of the supplier, agreed to furnish this Guarantee subject to the terms disconditions stated below:
	W THIS DEED WITNESSES THAT IN pursuance of the above said agreement, the guarantor eby agrees and covenants With company is as follows:-
1)	That during the period this contract of Guarantee remains effectual, the guarantor shall be liable in respect of the amount due and owing to the company in respect of the payments to the extent of Rs (in words) against any loss or against any loss or (the company by reasons of any breach of the terms of the
	damage caused to or suffered by the company by reasons of any breach of the terms of the said order / contract / Agreement by the supplier.
2)	The Guarantor hereby undertakes to pay the amounts due and payable under this guarantee without any demur, merely on demand from the company intimating that the amount claimed is

due by way of loss or damage caused to or suffered or would be caused or suffered by the supplier of any terms contained in the said order / contract. Any such demand made on the guarantor shall be conclusive as regards the amount due and payable by the Guarantor

irrespective of the fact whether the Contractor / supplier admits or denies.



- 3) The Guarantor further agrees that the agreement herein contained shall remain in force and effect till all the supplies to be made / Works to be performed / Services to be rendered under the said order / contract / agreement are completed to the entire satisfaction of the company or till company certifies that the terms and conditions of the said order / contract / agreement have been fully and properly carried out by the said supplier and accordingly discharges the Guarantee. Unless a demand or claim under this guarantee is made on the guarantor in writing on or before the expiry of claim period indicated in clause 6 below , the guarantor shall be discharged from all the liability under this guarantee thereafter.
- 4) The guarantor further agrees with the company that the company shall have the fullest liberty without the consent of the guarantor and without effecting in any manner the obligations of the guarantor hereunder to vary any of the terms of the said order / contract / agreement or extend the time of performance by the said supplier from time to time or refrain from exercising the power exercisable by the company against the said supplier or to forebear or omit to enforce any of the terms and conditions relating to the said order / contract / agreement, and the guarantor shall not be relieved of its liability in whole or in part , by reason of any act, commission or forbearance on the part of the company or by reason of any such variation, or extension being granted to the said supplier or by reason of any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving the guarantor.
- 5) The guarantor undertakes not to revoke this guarantee during its currency except with the previous consent of the company in writing.

6)	Notwithstanding anything	herein above o	contained, t	he liability o	f the guar	antor u	nder t	hese
	presents is restricted to	Rs		The guaran	tee shall	be in f	orce t	ill its
	expiry on	unless a c	demand is n	nade on the	guarantor	within S	SIX mo	onths
	from the date of expiry, a	Ill the liability of the	he guaranto	or under this	guarantee	shall s	stand	fully
	discharged. The decision	of the claimant in	regard to b	oreach of cor	ntract is fin	al and	bindir	ng on
	the Bank		_					_

IN WITNESS whereof, the guarantor, acting through it authorised representative has executed this deed of Guarantee on the day, month and year first above written.

(Seal of the Bank to be affixed)

WITNESS

1.

2.



ANNEXURE - G

BHEL MEMBER BANKS (CONSORTIUM BANKS)

PBG SHALL BE ISSUED FROM THE FOLLOWING BANKS OR THEIR BRANCH OFFICES ONLY

SI. No.	Bank name
1	State Bank of India
2	Canara Bank
3	Punjab National Bank
4	Bank of Baroda
5	State Bank of Hyderabad
6	Corporation Bank
7	Syndicate Bank
8	State Bank of Travancore
9	ABN Amro Bank N.V.
10	Deutsche Bank AG
11	HDFC Bank Ltd.
12	CITI Bank N.A.
13	Standard Chartered Bank
14	ICICI Bank Ltd.
15	IDBI Bank Ltd.
16	HSBC Ltd.
17	Kotak Mahindra Bank Ltd.
18	Indian Bank
19	Oriental bank of Commerce
20	UCO Bank
21	Central Bank of India
22	The Federal Bank Ltd.
