


REQUEST FOR QUOTATION

	BHARAT HEAVY ELECTRICALS LIMITED Electronics Division PB No. 2606, Mysore Road Bangalore - 560026 INDIA	RFQ NUMBER: KMVM900157 RFQ DATE : 17.DEC.2008	Due Date 21.JAN.2009 Time: 13:00 HRS VENUE : NEW ENGG. BLDG
MMI:PU:RF:003			

	(for all correspondence) Purchase Executive : VEERACHARI KM Phone : 080-26998663 Fax : 00918026740138 E-mail: veerachari@bheledn.co.in
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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

1. TENDER / OFFER SHALL BE SUBMITTED IN TWO PARTS.
2. QUOTATIONS MAY BE SUBMITTED BY OEM OR THEIR AUTHORISED DEALERS.
3. VENDOR IS EXPECTED TO HAVE ESTABLISHED SALES,SERVICE AND SUPPORT NETWORK PREFERABLY, IN INDIA. A LIST OF THE SAME NEEDS TO BE ENCLOSED WITH THE OFFER.
4. A LIST OF REFERENCES INCLUDING CUTSTOMER'S DETAILS LIKE CONTACT, MACHINES INSTALLED, DATE OF INSTALLATION IN INDIA AND ABROAD SHALL BE SUBMITTED THAT ESTABLISHES THE SATISFACTORY PERFORMANCE OF SUPPLIER'S EQUIPMENT FOR AT LEAST THREE YEARS.
5. VENDOR IS ADVISED TO GO THROUGH THE GENERAL TERMS AND CONDITIONS DOCUMENT CPD-00 ENCLOSED WITH RFQ.
6. BHEL RESERVES THE RIGHT TO RESORT TO REVERSE AUCTION BEFORE THE PRICE BID OPENING.
7. VENDOR HAS TO CONFORM TO ALL THE CLAUSES LISTED IN THE TECHNO-COMMERCIAL TERMS (ANNEXURE-B OF DOCUMENT CPD-00). DEVIATIONS, IF ANY, TO BE HIGHLIGHTED AND BROUGHT OUT CLEARLY.
8. VENDOR HAS TO CONFORM TO ALL THE CLAUSES IN THE PURCHASE SPECIFICATIONS.
9. DELIVERY REQUIRED: WITHIN 12 WEEKS FROM THE DATE OF PURCHASE ORDER.
10. TERMS OF PAYMENT: 90% WITHIN 30 DAYS AND THE REST 10% AGAINST SUBMISSION OF PBG.

Sl No.	Description	Qty	Unit	Delivery qty	Delivery Date
1	CU9095003523 15KVA IGBT Based UPS Sys,Lead Acid Sys 15KVA IGBT Based UPS System, Lead Acid SMF batteries & Bypass Transformer along with SSVS as per specification PS-445-072	1	NO	1	31.MAR.2009

Total Number of Items - 1

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.

For and On behalf of BHEL.

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MMI:PU:RF:003		(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					
SI No.	Description	Qty	Unit	Delivery qty	Delivery Date
vii). All Prices should be written in words and numbers.					
viii). Excise Chapter Heading should be mentioned for all items where VAT is applicable .					
Vendors list to whom RFQ has been sent:					
1. BHEL, Electronics Division (X563699) - 6400007333					

For and On behalf of BHEL.



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SPECIFICATION FOR UPS SYSTEM

PROJECT: CENTRE OF EXCELLENCE ON POWER ELECTRONICS(IGBT)

CUSTOMER : BHEL-EDN, BANGALORE

SCOPE OF SUPPLY:

The UPS system comprises of

1. 15kVA, IGBT based Single phase, 230V AC, 50Hz UPS comprising of
 - a. 100% capacity Rectifier cum charger with Input Isolation transformer-1 No.
 - b. 100% Capacity Inverter-1 No.
 - c. Static switch - 1 set
 - d. Manual bypass switch - 1 no.
Input: 415V,3 phase
Output: 230V,1 phase
 - e. Lead Acid SMF batteries for 15 minutes backup at 15kVA/12KW load
Make: UPLUS/Exide/Amararaja
 - f. Bypass transformer along with Solid State Voltage Stabilizer
2. Non compartmentalized ACDB for UPS supply
3. 15A,110V DC Rectifier Charger with Input Isolation transformer-1 No.
Input: 415V,3 phase
Output: 110V DC
And comprising of
 - a. Lead Acid SMF batteries for 15 minutes backup
Make: UPLUS/Exide/Amararaja
4. Non compartmentalized DCDB for 110V DC Supply
5. Spares as in Annexure-1

NOTE: Vendor to use same make and rating of batteries in Sl.nos.1e & 3a above.

REVISIONS 00 27.10.08
01 06.12.08

APPROVED BY

V.VENKATESH

PREPARED BY
L. Subbalakshmi
L.SUBBALAKSHMI

ISSUED BY
TRACTION ENGG.

DATE
06.12.2008



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UPS OPERATION PHILOSOPHY:

UPS system shall be working in Non-Redundant configuration having one set of Rectifier and Inverter. Under normal conditions, when AC mains power is available, the rectifier shall operate and supply DC power for float / rapid charging the battery and simultaneously to inverter. In case of incoming supply failure or failure of the rectifier, the battery shall feed the inverter without any interruption. The rectifier shall be designed for simultaneously feeding complete inverter load and float / rapid charging of the battery to its rated capacity within 10 hrs. The rectifier shall be equipped with automatic 'On Line' as well as manual charging facility.

Normally the inverter will be synchronized with bypass (Solid State Voltage Stabilizer) supply. In case, the inverter develops a fault, the complete load shall be transferred to stabilized bypass (Solid State Voltage Stabilizer) supply through static switches and retransfer of load from bypass supply to the inverter shall be done automatically.

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1. UPS DESIGN & PERFORMANCE REQUIREMENTS

A. Rectifier

1. Incoming AC supply shall be converted to DC through phase controlled rectifier. The rectifier shall operate according to the constant voltage current limiting principle and shall incorporate a "Soft Start" feature to gradually accept load on initially energizing.
2. The rectifier section of the UPS system shall be capable of precise regulation to prevent damage to the battery. The output voltage of rectifier's DC bus without the battery shall be stabilized to within $\pm 1\%$ of set value during load variation between 0 to 100% of the rectifier and specified mains input supply voltage variation.
3. The UPS system including the stabilized bypass (Solid State Voltage Stabilizer) shall be galvanically isolated from input power supply system by providing double wound transformer. The transformer shall be natural air cooled, dry type suitable for location inside panel. The rectifier shall also have a double wound transformer at its input.
4. Transient / surge protection circuit shall be provided in the input circuit to rectifier to protect the UPS from surges & voltage spikes.
5. Facility shall be provided to enable testing of rectifier independent without disconnection of inverter.
6. Facility for initial charging of batteries shall also be provided. The inverter shall be disconnected during initial charging of the battery.
7. The rectifier / charger shall be designed to completely charge the battery in a maximum time of 10 hours after complete discharge. Facilities shall be provided to initiate battery rapid charge operation by Manual & Automatic means. An auto charging sequence should be provided for the rapid and floating charging based on current sensing.
8. The rectifier shall be sized based on the maximum inverter input load when inverter is delivering its rated output at 0.8 p.f. lagging and recharge the battery to nominal rated capacity of the battery.
9. The DC rectifier shall sense the battery charging current and adjust the DC bus voltage to maintain the charging current to preset level. A separate current limit circuit shall be provided for adjustment of battery current. Subsequent to a discharge cycle when battery is connected to rectifier, the battery current shall be monitored, controlled and limited to set value automatically irrespective of the inverter input current.
10. The battery may be taken out of service for maintenance, during which period it shall be possible for the inverter to continue operation by drawing power from the rectifier. Ripple content at the DC link shall not exceed 2% RMS even with battery disconnected.

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B. Battery

1. Batteries shall be indoor, stationary type, SMF Lead Acid type.
2. The following factors shall be considered for Battery sizing,
 - a. Load power factor of 0.8
 - b. Battery current = $\frac{\text{Inverter rated KVA} \times \text{Load P.F.}}{\text{Inverter efficiency} \times \text{end Cell voltage} \times \text{No. of cells}}$
 - c. Minimum end cell voltage 1.75 V per cell
 - d. Back up time 15 minutes

C. Inverter

1. The inverter shall operate satisfactorily for variation of DC bus voltage from fully discharged condition of the battery to rapid charge voltage of battery and inverter output load current.
2. It shall be possible to vary the inverter output voltage within +/- 5% of specified output voltage. This adjustment shall be possible to be made when the inverter is in operation.
3. The steady state output voltage and frequency (free running) variation of inverter shall not exceed +/- 1% from the set value for specified input power supply conditions from no load to full load condition and load power factor variation from 0.6 lag to 1.0.
4. The UPS output voltage waveform shall be sinusoidal. The Total Harmonic distortion of voltage waveform at inverter output shall not exceed 3% if RMS value of the fundamental considering any linear load up to maximum rated output of UPS system at rated power factor and not exceeding 5% under non-linear load.
5. UPS shall have capacity to deliver a minimum overload of 125% for 10 minutes and 150% for 60 secs. UPS shall be provided with current circuit to avoid excessive loading beyond its permissible overload withstand capability.
6. Inverter shall be 'phase locked' to the stabilized bypass power supply as long as stabilized bypass supply frequency remain within +/- 6% of nominal. When bypass supply frequency variation exceeds the above limits, the inverter shall be delinked from mains. Free running frequency tolerance limit shall not be exceed +/- 1%. Facility shall also be provided for adjustment of synchronizing frequency from 1% to 6% in steps of 1%.
7. Both Sync and Async transfer facility shall be provided & it should be programmable.
8. When the Inverter is in operation, the temperature rise in the panel shall not be more than 15 Deg.C above ambient for all operating conditions.



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D.Static Switch

1. Suitable rated bi-directional thyristorized static switch must be provided in the inverter output and stabilized bypass (Solid State Voltage Stabilizer) supply to ensure positive isolation of faulty inverter. The short time rating of all the static switches shall be at least 10 times the rated output for 20 msecs.
2. Facility shall be provided to manually and automatically initiate transfer of the load from inverter to the stabilized bypass supply and manually from stabilized bypass supply to the inverter.
Undervoltage and overvoltage sensing levels to initiate transfer shall be adjustable. The transfer time between inverter and bypass supply shall not exceed 4 msec and 20 msec in synchronous and asynchronous mode respectively.

E. Bypass Line Equipment

1. Bypass line equipment consist of 3-ph to 1-ph Isolation transformer followed by Solid State Voltage Stabilizer.
2. The steady state output voltage and frequency (free running) variation shall not exceed +/- 2% from the set value for specified input power supply conditions from no load to full load condition.

F. AC Distribution Board

1. Non compartmentalized type AC Distribution board for UPS output distribution.
2. Suitably rated incoming MCCB.
3. 10 nos. outgoing SP MCBs of 10Amps rating each.
4. Input Voltage & Current meter to be provided

G. Alarm, Control, Indication and Metering Requirements for UPS

- Following alarm, control, indication and metering will be provided using LCD display.

Metering :

Rectifier

- a) Incoming line voltage
- b) DC voltage at rectifier output
- c) Battery charging / discharging current.

Inverter

- a) AC voltage at inverter output
- b) AC current at inverter output
- c) Frequency meter at inverter output.



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Load

- a) Voltage
- b) Current
- c) Frequency

Alternate

- a) Output Voltage
- b) Output Current
- c) Output Frequency

Indications :

- A. AC mains 'ON' - Rectifier
- B. AC mains 'ON' - Alternate

Rectifier

- a) Rectifier output 'ON'
- b) Battery on float charge
- c) Battery on boost charge

Inverter

- a) Load on Inverter
- b) Inverter synchronized with mains.

Audio visual alarms:

- a) Input under voltage
- b) Input over voltage
- c) Battery discharging.
- d) End of battery discharge.
- e) Battery low.
- f) Inverter overload.
- g) Inverter under voltage
- h) Inverter over voltage
- i) Alternate over voltage
- j) Alternate under voltage
- k) Alternate frequency out of limit
- l) DC over voltage
- m) Inverter overload trip
- n) Over Temperature.
- o) CPU fault
- p) Inverter disconnected.

H. Tests:

- a. Routine tests in accordance with IEC-146-4 to be conducted.
- b. Temperature Rise test: The entire UPS system shall be tested at ambient temperature for 12 hrs under rated full load condition till temperature stabilises.



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2. FLOAT CUM BOOST CHARGERS REQUIREMENT:

A. Charger & Battery:

1 No 100% capacity charger shall be provided meeting the following requirements:

1. Charger shall be adequately rated, shall meet full DC load of 15Amps at 110V DC plus charge the fully discharged battery in a maximum time 10 hours after complete discharge.
2. Charger input voltage shall be 415 V, 50 Hz, 3 phase system, with voltage deviation of $\pm 10\%$ and frequency deviation of $\pm 5\%$. Charger shall be able to maintain output voltage at $\pm 1\%$ from no load to full load. Float and equalizing controls shall have an adjustable range of $\pm 5\%$ continuous.
3. Charger shall have current limiting feature.
4. Charger output voltage high shall be alarmed. Automatic tripping at charger output voltage high (adjustable) shall also be provided.
5. Chargers shall have a slow-walk-in circuit to prevent full DC current in less than 15 sec after AC input is energised.
6. Minimum full load efficiency at nominal output and float voltage shall be 90%.
7. Charger shall be provided with following auxiliary equipments.
AC voltmeter, DC voltmeter, DC ammeter, charger on/off PBs
8. Indications and alarm contacts for the following conditions shall be provided.
Input AC failure, charger failure, system on battery operation,
9. Charger shall be provided with input, output circuit breaker.
10. Batteries offered shall be SMF lead acid type of 12V of suitable capacity to provide backup time of 15 minutes.
11. Charger shall be provided in sheet steel floor mounted enclosure and batteries shall be provided in open metal rack.
12. Ambient temperature minimum to be taken as 10 Deg.C.
13. Capacity factor to be taken for 15 Amps for 15 minutes.



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B. DC Distribution Board

1. Non compartmentalized type DC Distribution board for 110V DC distribution.
2. Suitably rated incoming MCCB.
3. Outgoing MCBs-Rating and quantity as below:
 - a. 10 nos. of 10 Amps each
 - b. 10 nos. of 5 Amps each
 - c. 20 nos. of 2 Amps each
4. Input Voltage & Current meter to be provided

C. Tests:

- a. Voltage Regulation and Line Regulation test to be conducted.

3. GENERAL REQUIREMENTS :

1. Design Temperature : 45 Deg C
2. Colour of cubicle enclosure:
 - a. Front and Rear, exterior and interior - RAL 9002 (Grey).
 - b. Side plate, exterior and interior - RAL 5012 (Blue).
3. Degree of Protection : IP-41
4. All the thyristors, diodes and other electronic devices of UPS & Rectifier Charger shall be protected with high speed semiconductor fuses. All electronic control and monitoring and Printed circuit cards shall be suitable for easy replacement. Monitoring points shall be provided on each of the PCBs and the PCB shall be firmly clamped in position so that vibration or long usage do not result in loose contacts. All PCBs shall be placed in a manner to avoid replacement of a PCB by a wrong spare PCB. Failure of each PCB shall be indicated by visual alarms.
5. Maximum noise level from UPS system/Rectifier Charger at 1 meter distance, under rated load with all normal cooling fans shall not exceed 75 dBA.
6. The equipment should be installed in BHEL's premises in Bangalore as when required by BHEL. The equipment should be successfully installed/commissioned and demonstrated by the successful bidder.
7. Successful bidder should provide user manual for the equipment which should include user instructions for the Hardware & Software, details of the Hardware and its parts and the maintenance instruction of the systems. The manuals are to be provided in hardcopy(2 copies) and in soft format.



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4. PRE QUALIFICATION CRITERIA

1. The vendor shall be an Original Equipment Manufacturer (OEM). Only the OEM or their authorized dealers along with an authorization letter can submit offers. An authorized Representative/Dealer cannot quote for the same equipment from more than one OEM.
2. 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 to be furnished.
3. The vendor should have already supplied and installed atleast 10 UPS systems of 15kVA or higher in India during the past 5 years and these must be operating satisfactorily for atleast 3 years. The details of the customers with contact details, date of installation etc. to be provided.
4. The vendor or their authorized service representatives shall have trained engineers for commissioning, maintenance, service & support for the offered equipment and shall be in a position to provide prompt after sales service and spares support for our installations.
5. 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.
6. The vendor shall furnish a comprehensive warranty for at least 12 months from the date of commissioning.

Note:

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.
2. The Pre qualification criteria are mandatory requirements and the technical bids will be evaluated only when the Pre Qualification criteria are met.

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5. Documents to be submitted along with the Offer:

- a. Single Line Diagram
- b. GA drawings
- c. Circuit diagram
- d. Fault co-ordination details
- e. Charger/Inverter rating calculation(both for UPS and 110V DC Battery charger
- f. Battery sizing calculation
- g. Technical write-up
- h. Technical literature/catalog of each component
- i. Complete Bill of material with Make and model
- j. Filled up Datasheet given in Annexure-2
- k. **Any deviation to Specification be clearly mentioned**
- l. Annual Maintenance charges for 3 years

6. Documents to be submitted after placement of Purchase Order:

- a. Single Line Diagram
- b. GA drawings
- c. Circuit diagram
- d. Fault co-ordination details
- e. Charger/Inverter rating calculation(both for UPS and 110V DC Battery charger
- f. Battery sizing calculation
- g. Technical write-up
- h. Technical literature/catalog of each component
- i. Complete Bill of material with Make and model
- j. Filled up Datasheet given in Annexure-2
- k. Quality Plan

7. Final documents to be submitted:

- a. Type test reports/Certificates as per Specification/QP
- b. Instruction/O&M manual



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ANNEXURE-1: SPARES

The following list of Spares shall be supplied:

1. UPS Spares-1 set consisting of

- a. Each PCB - 1 no.
- b. Fuses - 1 set
- c. Charger Thyristor - 1 no.
- d. IGBT - 1 no.
- e. Static switch Thyristor - 1 no.

2. Rectifier Charger Spares-1 set consisting of

- a. Each PCB - 1 no.
- b. Fuses - 1 set
- c. Charger Thyristor - 1 no.

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ANNEXURE-2: DATASHEET

1.0 MAINS SUPPLY

1.1	VOLTAGE	:	
1.2	FREQUENCY	:	
1.3	POWER FACTOR (APPROX. AT RATED LOAD)	:	
1.4	RECOMMENDED FEEDER KVA	:	

2.0 ALTERNATE I/P

2.1	VOLTAGE-3 Ph BYPASS	:	
2.2	FREQUENCY	:	

3.0 BATTERY / DC LINK

3.1	DC LINK VOLTAGE RANGE	:	
3.2	NUMBER OF BATTERIES	:	

4.0 OUTPUT

4.1	VOLTAGE-1Ph	:	
4.2	REGULATION (INVERTER)	:	
	RECOVERY TIME AFTER 100% - 0 -100% LOAD CHANGE	:	
4.3	FREQUENCY	:	
4.4	SLEW RATE	:	
4.5	WAVEFORM	:	
4.6	LOAD POWER FACTOR RANGE	:	
4.7	UPS RATING	:	
4.8	OVER LOAD	:	

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4.9	FUSE CLEARING (<1/4 TH CYCLE)		
4.10	INVERTER DC-AC CONVERSION EFFICIENCY		
5.0 CABLING			
5.1	CABLE ENTRY	:	
6.0 ENCLOSURE			
6.1	DEGREE OF PROTECTION		
6.2	MODULE DIMENSION		
6.3	FINISH		
7.0 OPERATING CONDITIONS			
7.1	MAX. AMBIENT TEMPERATURE	:	0-45 deg C
7.2	ATMOSPHERE	:	NON CORROSIVE, DUST FREE FREELY VENTILATED - CAPABLE OF MAINTAINING AMBIENT TEMPERATURE WITHIN SPECIFIED LIMITS.
7.3	ALTITUDE	:	UP TO 1000 METERS FROM MSL
7.4	HUMIDITY	:	95% RH-NON CONDENSING
7.5	AUDIBLE NOISE @ 1 mts dbA	:	<65 dB

Bharat Heavy Electricals Ltd.,

(A Government of India undertaking)

Electronics Division

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

Ph: +91-80-26742974 / 26998663

Fax: +91-80-26740138

General Terms & Conditions for Supply of Imported & Indigenous Capital Items (Two part bid)

Bidders are required to read the general terms & conditions carefully and submit their quotation covering all the points. Any order resulting from this enquiry shall be governed by the general terms and conditions listed below.

1. **TWO PART BID:** Quotation shall be submitted in two part bid i.e.

- a) **Techno-commercial i.e., Un-priced Bid:** 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 **QUOTATION FORMAT (ANNEXURE - A / ANNEXURE - B)** preferably in the same format. Any other enclosure, which the supplier 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**. Un-priced copy of price bid (without price) shall also be enclosed with the techno-commercial bid i.e. a copy of the price bid without prices.

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 Techno-commercial bid.

Manufacturer's name, their trade mark and brand if any, should be invariably mentioned in the tender and illustrative leaflets giving technical particulars etc., are to be attached to the tender to facilitate consideration of the offer.

b) **Price Bid :**

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 included in the price bid.

Please indicate the rates in both figures and words. However in case of difference / discrepancy, the rates indicated in figures shall be considered as correct.

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 superscribed 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. Late Tenders i.e. Tenders received after due date & time are liable to be rejected.
3. The rates quoted against each item shall be in the same units stated in the enquiry. If the quotations are submitted in any other unit than specified, relationship between two sets of units must be furnished in the offer.
4. As far as possible, the quotations shall be free from corrections / overwriting. Corrections if any should be initialed with your seal and signature. 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.
5. Quotations are to be duly signed. Unsigned bids/offers are liable for rejection.
6. All the bidders or their authorized representatives (with authorization letter from their principals) can 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 quantities in each item to be purchased may vary from quantities enquired according to the actual requirement at the time of placing the purchase order. Quantity discount if any should be mentioned in your offer.
9. BIDDERS (for indigenous purchase) shall indicate clearly Excise duty, Education cess, Sales Tax/VAT, Octroi, 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. Seeking price amendments for change in Excise duty due to crossing of turnover limits will not be considered under any circumstances.
10. **TOTAL COST TO BHEL:** Purchase order will be placed on the lowest bidder (L1) only among the technically & commercially accepted offers. Lowest Bid (L1) is determined on the basis of the total cost to BHEL.

(a) FOR FOREIGN PURCHASE:

Total cost to BHEL = Total basic value 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 published in Economic Times (TT selling) will be considered.

(b) FOR INDIGENOUS PURCHASE:

Total cost to BHEL = Total basic value + 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.

11. FIRM PRICE: Rates quoted should be firm 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 supplier's scope, then the price shall remain FIRM till commissioning & handing over of the complete system.

12. 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 26 (Ai)**.

The payment terms are as follows:

- a) 100% against complete dispatch documents i.e. AWB / BOL, Invoice, Packing list, Nil shortage certificate, Certificate of country of origin etc., (where commissioning & warranty is NOT involved).
- b) 90% against complete dispatch documents i.e. AWB / BOL, Invoice, Packing list, Warrantee certificate, Nil shortage certificate, Certificate of country of origin etc., & 10 % on submission of Performance Bank Guarantee (PBG) (where commissioning is NOT involved).
- c) 75% against complete dispatch documents i.e. AWB / BOL, Invoice, Packing list, Warrantee certificate, Nil shortage certificate, Certificate of country of origin etc., 15% on successful installation, commissioning and start-up trials & 10% on submission of Performance Bank Guarantee (PBG).
- d) If PBG is not submitted by the vendor, then the final 10% payment will be made against submission of supplementary invoice after warranty period + 6 months of claim period.

(b) FOR INDIGENOUS PURCHASE:

- a) 100% within 30 days from the date of receipt of equipments / materials (where commissioning & warranty is NOT involved).
- b) 90% within 30 days from the date of receipt of equipments & balance 10% against submission of PBG (where commissioning is NOT involved).
- c) 75% within 30 days from the date of receipt of equipments, 15% after the successful installation, commissioning & start-up trials & balance 10% against submission of PBG (wherever commissioning & warranty are involved).

- d) If PBG is not submitted by the vendor, then the final 10% payment will be made against submission of supplementary invoice after warranty period + 6 months of claim period.

13. ADVANCE PAYMENT: Quotations with payment terms of “Advance” or “Inland Letter of Credit” will not be considered and such offers are liable for rejection commercially.

14. PENALTY: Failure to supply the item within the delivery date specified in the purchase order will make the supplier liable to an unconditional penalty of ½% (One half percent) of the basic value of the goods in arrears per week 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.

15. PBG: Performance Bank Guarantee (PBG) to be submitted as per the BHEL prescribed format given in **ANNEXURE - D / ANNEXURE - E** for 10% of the basic equipment value obtained from any BHEL member banks.

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.

16. WARRANTY: Goods dispatched shall have warranty period of 12 months from the date of dispatch or as mentioned in the RFQ.

17. TERMS OF DELIVERY:

(a) FOR IMPORTED PURCHASE:

Price offered shall be for goods packed and delivered **F.O.B.** (named international Airport) 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 Airworthy & Roadworthy, best suitable for trans-shipment and to prevent transit damages.

Vendors shall indicate the name of International Airport.

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

(b) FOR INDIGENOUS PURCHASE:

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

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

Dispatch the consignments through EDN/BHEL approved transporters on Door Delivery basis furnished below.

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 Ltd., Bangalore. (URL)

Small consignments can be dispatched through M/S First Flight Couriers Ltd.

Transit insurance shall be arranged by BHEL. Vendor shall intimate the dispatch details to BHEL immediately after effecting shipment, to arrange transit insurance accordingly.

18. DELIVERY REQUIREMENT: Equipment shall be delivered, as per the delivery schedule indicated in the RFQ.

19. VALIDITY: Quotation should remain valid for a period of **90 days** from the date of technical bid opening.

20. BHEL reserves the right to RE-FLOAT/REJECT/CANCEL the TENDER ENQUIRY (RFQ) without assigning any reason or cause thereof. Quotes received against this TENDER ENQUIRY are subject to and governed by all these terms and conditions. BHEL's decision will be final in awarding of the contract and binding on all vendors.

21. REVERSE AUCTION: BHEL reserves the right to resort to reverse auction / online Bidding before opening of price bid.

22. POST-ORDER REQUISITES:

- a) 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.
- b) Test certificates, Calibration certificates and warranty certificates as stipulated at the time of ordering shall be furnished.
- c) Items shall be dispatched by Air/Road/Sea worthy packing. Any damage and later rejection, due to poor / improper packing shall be to supplier's account.
- d) Any damage/rejection should be made good or replaced immediately without any extra cost to BHEL.
- e) 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.
- f) 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.
- g) Performance Bank Guarantee to be executed on Rs.100/- non-judicial stamp paper as per BHEL prescribed format as given as Annexure (c).

23. Any dispute arising out of this contract shall be referred to the sole arbitration of Head of Materials Management, Control Equipment, BHEL, EDN, Bangalore or any other officer nominated by him and his decision shall be final and binding on the parties. The venue of the arbitration in all cases shall be Bangalore.

24. All suits in respect of the above lie in the court of Jurisdiction of Bangalore (India) only.

25. Equipment shall comply with the standard requirements of ISO 14001 & OHSAS 18001.

26. **REGRET LETTER:** In case, the supplier is unable / not willing to quote (for BHEL's registered vendors), a letter of regret shall be sent.

27. 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)

Sl. No.	BHEL standard term	If you quote	Loading factor in % for non-compliance
1	100% against "SIGHT DRAFT" on presentation of dispatch documents to our Bankers.	(a) 100% Through Letter of Credit (LC)	(a) 3.50 %
2	90% against "SIGHT DRAFT" + 10% against PBG (wherever PBG is involved)	(b) 90% Through Letter of Credit (LC)	(b) 2.25 %
3	75% against "SIGHT DRAFT" + 15% after commissioning + 10% against PBG (wherever commissioning & PBG is involved)	(c) 75% Through Letter of Credit (LC)	c) 1.875 %

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

Sl. No.	BHEL standard term	If you quote	Loading factor in % for non-compliance
1	100% within 30 days from the date of receipt (credit payment)	Payment through bank	2 % x percentage quoted through bank
		Payment against proforma invoice	1.25 % x percentage quoted through proforma invoice
2	90% within 30 days from the date of receipt + 10% against PBG (wherever PBG is involved)	Payment through bank	2 % x percentage quoted through bank
		Payment against proforma invoice	1.25 % x percentage quoted through proforma invoice
		100% within 30 days from the date of receipt & PBG	Nil

3	75% within 30 days from the date of receipt + 15% after commissioning + 10% against PBG (wherever commissioning & PBG is involved)	Payment through bank	2 % x percentage quoted through bank
		Payment against proforma invoice	1. 25 % x percentage quoted through proforma invoice
		100% within 30 days and after commissioning & PBG	Nil

B. For non compliance of Penalty clause:

Sl. 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 basic value of the items not supplied /delayed	Not agreed.	10 %
		5% max., agreed.	5%
		Other than the above.	10% - (minus) agreed max. %

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

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

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

Sl. 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 or from the document approval	Not agreed for the stipulated delivery in the enquiry	1 % per week up to max. of 10% for the difference in period

E. For non compliance of Warranty:

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

ANNEXURE - A

TECHNICAL BID (TO BE ENCLOSED WITH TECHNO-COMMERCIAL BID)
(for Foreign Purchase Orders)

Sl. 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) 90 % is payable on negotiation of complete set of original documents & balance 10% against submission of PBG (where commissioning is NOT involved). (b) 75 % is payable on negotiation of complete set of original documents, 15% after satisfactory commissioning & balance 10% against submission of PBG (wherever commissioning & PBG is involved). (c) Deviation if any please specify Note: Refer clause 12 above .	(a) Acceptable / Not acceptable (b) Acceptable / Not acceptable (c)
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 supplier/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 15 .	Yes / No
5	Terms of delivery: (a) F.O.B international Airport/Seaport as per clause 17 Indicate name of International Airport/Seaport (b) Deviation if any Please specify	(a)Acceptable / Not acceptable (b)
6	Warranty: (a) 12 months from the date of dispatch (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 (b) Deviation if any Please specify	(a) Acceptable / Not acceptable (b)

Signature of renderer / with seal

ANNEXURE - B

TECHNICAL BID (TO BE ENCLOSED WITH TECHNO-COMMERCIAL BID)

(For Indigenous Purchase Orders)

Sl. 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	Excise duty: If applicable indicate %.	Applicable / Not applicable ED: _____%
3	Sale tax: If applicable indicate %	Applicable / Not applicable (a) VAT _____% (b) CST _____% against form C
4	Payment terms: (a) 90 % basic + 100% taxes, duties & freight charges within 30 days from the date of receipt & balance 10% against submission of PBG (where commissioning is NOT involved) (b) 75 % basic + 100% taxes, duties & freight charges within 30 days from the date of receipt, 15% after satisfactory commissioning & balance 10% against submission of PBG (wherever commissioning & PBG is involved). (c) Deviation if any please specify Note: As per clause 12	(a) Acceptable / Not acceptable (b) Acceptable / Not acceptable (c)
5	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 supplier/delayed. (b) Deviation if any Please specify	(a) Acceptable / Not acceptable (b)
6	Performance Bank guarantee (PBG): PBG for 10% of the basic material cost shall be furnished in the BHEL prescribed format as per clause 15 .	Yes / No
7	Terms of delivery: (a) Ex EDN / BHEL, Bangalore (Free delivery to EDN/BHEL Bangalore including packing & forwarding charges) (b) Deviation if any Please specify	(a)Acceptable / Not acceptable (b)
8	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)
9	Delivery period: Indicate number of weeks from the date of issue of Purchase order	_____Weeks
10	Validity: (a) Quotation should remain valid for a period of 90 days from the due date (b) Deviation if any Please specify	(a) Acceptable / Not acceptable (b)

Signature of renderer / with stamp

ANNEXURE - C

LIST OF INTERNATIONAL AIRPORTS

Sl. 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, Manihem, Nurnberg, Hamburg, Stuttgart, 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	Bartislawa
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

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.

WHEREAS you have entered into a contract reference No PO NO. _____ with M/s _____ having its registered office at _____ for the supply of _____ as detailed in your purchase order No. _____ which is hereinafter referred to as "the said contract" and WHEREAS M/s _____ has undertaken to produce a Bank Guarantee for 10% (Ten Percent) of _____ the contract price amounting to _____ (_____) to secure its obligations to Electronics Division, BHEL having its registered office at New Delhi for the performance of the contract including the warranty of the equipment supplied, We _____ Bank , _____ hereby expressly, irrevocably and unreservedly undertake and guarantee as principal obligors on behalf of M/s _____ that in the event Bharat Heavy Electricals Ltd. (B.H.E.L.) declares to us in writing that M/s _____ has not fulfilled any obligation according to the contractual obligation of the said contract, to pay you on demand and without demur to Bharat Heavy Electricals Ltd., Electronics Division , Mysore Road, P.B.No. 2606, Bangalore-560 026, India an amount of _____ (in words _____) subject to as may be determined below:

- 1) Notwithstanding any right M/s. _____ may have directly against you or _____ any disputes raised by M/s _____, Your written demand shall be conclusive evidence to us that repayment is due under the terms of the said contract and shall be binding on us.
- 2) We shall not be discharged or released from this undertaking and Guarantee by any arrangements, variations made between you and M/s. _____ with or without our consent and Knowledge or by any alterations in the obligations of M/s. _____ by any forbearance whether as to payment, time, performance or otherwise.
- 3) This guarantee shall remain valid until the end of twenty-four weeks after the close of the warranty period or until the same is reported by BHEL to us whichever 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) This guarantee shall be a continuing guarantee subject to the foregoing and shall not be discharged by any change in the constitution of the Bank or M/s. _____.
- 6) This guarantee shall be governed by and constructed in accordance with the Laws of India.
- 7) At any time _____ Bank may render this guarantee null and void by paying to Bharat Heavy Electricals Ltd. the full amount being _____ (in words _____)

For and on behalf of Bank
by its Authorised Signatory

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 - E

PERFORMANCE BANK GUARANTEE
(FOR INDEGENOUS PURCHASE ORDERS)

THIS DEED OF GUARANTEE made and executed on the _____ day of _____ (year), by the _____ (Bank), registered under the Companies Act 1956/Nationalised Bank constituted under the Banking Companies (acquisition and transfer of undertakings) Act constituted under the State Bank of India Act / Subsidiary Banks Act, having its registered / head office at _____ represented herein by its Branch Manager / authorised representative Sri. _____ & Sri. _____ (Hereinafter called 'guarantor ' which term shall mean and include its successors and assigns)

IN FAVOUR OF BHARAT HEAVY ELECTRICALS LIMITED

_____ (Buyer's Name), a company registered under the companies Act, 1956 having its registered office at BHEL House at Siri Fort , New Delhi-100 049 and its Electronics Division at Mysore road, Bangalore-26 (hereinafter referred to as the 'Company' Which term shall include its successors and assigns):

Whereas the company has placed an order on _____ (State the name of the company / firm and its address) (hereinafter referred to as the 'Supplier' which term shall mean and include its liquidators, successors and assign) for the supply of system under order / Contract No _____ Dt _____.

AND WHEREAS the supplier has agreed to supply the materials and carryout the works as detailed and in accordance with the terms set out in the said order/contract.

AND 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 rendered under the said order / contract between the supplier and the company, till the company is satisfied with the mechanical Warranties and the performance standards stipulated in the said order / contract between the company and the supplier has been duly fulfilled, except against a Bank Guarantee for the said sum of Rs _____ in favour of the company by reputed Bank, in which 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 Guarantor has at the request of the supplier, agreed to furnish this Guarantee subject to the terms and conditions stated below:

NOW THIS DEED WITNESSES THAT IN pursuance of the above said agreement, the guarantor hereby 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 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 contained, the liability of the guarantor under these presents is restricted to Rs_____. The guarantee shall be in force till its expiry on _____ unless a demand is made on the guarantor within SIX months from the date of expiry, all the liability of the guarantor under this guarantee shall stand fully discharged. The decision of the claimant in regard to breach of contract is final and binding on the Bank.

IN WITNESS whereof, the guarantor, acting through its 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 - F

BHEL MEMBER BANKS

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

State Bank of India, CAG Branch 10 th Floor, Vijaya Building Barakamba Road, NEW DELHI - 110 001	Deutsche Bank, Tolstoy Marg, NEW DELHI - 110 001
Canara Bank, 74, Janpath, NEW DELHI - 110 001	HDFC Bank Ltd, 5 TH floor, H T House, K G Marg, , NEW DELHI - 110 001
Punjab National Bank, 74 Janpath, NEW DELHI - 110 001	CITI Bank NA, Jeevan Vihar Building, Sansad Marg NEW DELHI - 110 001
Bank of Baroda, Corporation Banking Branch, 11 th Floor, BOB Building, Sansad Marg, NEW DELHI - 110 001	Standard Chartered Bank, H2, Block Connaught Place NEW DELHI - 110 001
State Bank of Hyderabad, Surya Kiran Building, K G Marg, NEW DELHI - 110 001	ICICI Bank Ltd, ICICI Tower, Bisham Pitamah Marg, Pragati Vihar, NEW DELHI - 110 003
State Bank of Mysore, Antrikash Bhawan, K G Marg, NEW DELHI - 110 001	IDBI Bank Ltd, 19 K G Marg, Surya Kiran Building, NEW DELHI - 110 001
State Bank of Mysore, Industrial Finance Branch, 18, Ramanashree Arcade,, M G Road, BANGALORE 0 560 001	HSBC Ltd, ECE House, 28K G Marg, NEW DELHI - 110 001
State Bank of Travancore, Travancore House, IF Branch, NEW DELHI - 110 001	
