



An ISO 9001
Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT / MATERIALS MANAGEMENT

ENQUIRY NOTICE INVITING TENDER

Phone: +91 431 257 7421 / 7833

Email : vkarna@bhel.in

: vijayak@bhel.in

Website : www.bhel.com

TWO PART BID	Enquiry Number:	Enquiry Date:	Due date for submission of quotation:
Tender to be submitted in two Parts	2741900016	19.10.2019	11.11.2019

You are requested to quote the Enquiry number date and due date in all your correspondence. This is only a request for quotation and not an order.

Please note that under any circumstances both delayed offer and late offers will not be considered. Hence vendors are requested to ensure that the offer is reaching physically our office before 14.00 hrs on the Date of tender opening.

Item	Description	Quantity
10	2 KVA Emergency Power Supply Units with Batteries as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com and https://eprocure.gov.in	6 Nos.

Important points to be taken care during submission of offer

1. Delivery terms shall be FOR BHEL Stores, PPPU, Thirumayam-622507
2. Compliance Form No: MM/CE/IND/12 to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
3. Delivery period required is 3 Months from the date of Purchase Order.
4. Commissioning & Demonstration shall be done at BHEL Thirumayam by the supplier.
5. Commissioning & Demonstration shall be done free of cost.
6. EMD Not Applicable
7. All updates, amendments, corrigenda, etc., (if any), for each tender will be posted only on the above websites from time to time, as and when required, until each tender is opened. There will be no publication of such updates, amendments, corrigenda, etc., through newspapers or any other media.

BHEL's General guidelines / instructions compliance form and technical specification can be downloaded from BHEL web site <http://www.bhel.com> and <https://eprocure.gov.in> (public sector units > Bharat Heavy Electricals Limited page) under Enquiry reference "2741900016".

(This is not an E – Tender. Please submit your offer in hard copies)

Tenders should reach us before 14:00 hours on the due date
Tenders will be opened at 14:30 hours on the due date
Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

V. Karunakaran
19/10/19

V. KARUNAKARAN
Dy. General Manager
Capital Equipment / MM
BHEL / Tiruchirappalli - 620 014

Specification of 2 kVA Online UPS				
Sl.No.	Description	BHEL's Requirement	Vendor's Response	Deviations, if any
	Item description	General purpose 2 kVA online emergency power supply unit for the connected load of 1600 W with 4 hour battery backup for desktop PC systems and suitable for operation on single phase 230 V, 50 Hz AC supply.		
1.00	SPECIFICATION of UPS			
1.01	Make and Model	Vendor to specify the make and model of the online UPS offered.		
1.02	AC input Voltage	Single Phase, 180 - 260 V, 50 Hz		
1.03	Power	Minimum capacity 2 kVA. Vendor to specify		
1.04	Output voltage & frequency	Phase:- Single Phase, Voltage:- 230 Volt AC, Frequency:- 50 Hz.		
1.05	Output waveform	Pure sine wave.		
1.06	Conversion technology	Whether Diode/ IGBT/ MOSFET. Vendor to specify.		
1.07	Efficiency	90% and above on resistive load. Vendor to specify.		
1.08	Meters	Output AC and DC metering (LED/ LCD type) for voltage and current.		
1.09	Displays	Capacity, output voltage and frequency, input voltage and frequency, inverter on, mains on, charger on, low battery, all protection, load percentage, present battery full. Vendor to specify.		
1.10	Thermal management	Integrated cooling (fan and heat sink)		

Sl.No.	Description	BHEL's Requirement	Vendor's Response	Deviations, if any
1.11	Operating temperature	20- 50 deg. Celcius		
1.12	Protection	Input under voltage and over voltage. Battery low voltage. Output short circuit. Output under/ over voltage. Output overload. Over temperature. DC over current protection. Output voltage regulation. Spike protection. Vendor to specify.		
1.13	Control switches	Input, output and inverter MCBs. HRC fuses for the above, beep sound for tripping, over/ under/ low voltage, short circuit and inverter trip control. Vendor to specify.		
1.14	Nominal battery voltage	Vendor to specify.		
1.15	Battery charging Current	1)Boost charging :- 2)Float charging :- Vendor to specify		
1.16	Total harmonic distortion	< 3% . Vendor to specify.		
1.17	Overload capacity	Minimum 110% for 10 minutes		
1.18	Automatic volatage regulation	Required		
1.19	Output power factor	0.7 or higher		
1.20	No. of outputs	Minmum 2		
2.0	BATTERY SPECIFICATION			
2.1	Type	Sealed Maintenance Free VRLA battery. Vendor to confirm.		

Sl.No.	Description	BHEL's Requirement	Vendor's Response	Deviations, if any
2.2	Make and Model	Exide, Amara raja, Luminous, SF sonic, Amco or Standard make batteries are acceptable. Vendor to specify.		
2.3	Specification	12 V, 150/160 Ah @C20 batteries are to be offered for the connected load of 1600 Watts for a battery back up of 4 Hrs. Vendor to confirm.		
2.4	No. of batteries	4 nos. Vendor to specify.		
2.5	Battery link and cabling	Suitable battery link and interconnecting copper cable from UPS to battery shall be supplied by vendor.		
3.0	GUARANTEE			
3.1	Guarantee for complete equipment and all supplied accessories and batteries for minimum 24 months from the date of acceptance of the equipment at BHEL, PPPU - Thirumayam. Vendor to confirm.			
4.0	Technical leaflet			
4.1	Technical leaflet of the offered emergency power supply unit and battery indicating the complete technical parameters, features, dimensions etc. to be enclosed with the offer.	Vendor to confirm.		
5.0	DOCUMENTATION			
5.1	Documentation (2 hard copies + 1 soft copy)	Detailed Operation & Maintenance manual of the equipment with all drawings of main assemblies, sub-assemblies and parts including electrical and PCB circuit diagrams with the part list also and periodic maintenance chart.		
6.0	Pre- Qualifying Criteria:			

Sl.No.	Description	BHEL's Requirement	Vendor's Response	Deviations, if any
6.1	The vendor should be either OEM or authorised dealer of UPS systems. In case of authorised dealers, valid dealership certificate shall be attached along with the offer.			
6.2	Only those vendors who have supplied and commissioned similar or higher capacity/ size equipment that is working satisfactorily for at least one year after commissioning should quote. Vendor has to provide atleast one PO copy as a supporting document.	Vendor to confirm.		
7.0	Scope of supply	Quantity		
7.1	General purpose of 2 kVA online emergency power supply unit for the connected load of 1600 Watts with 4 hour battery backup for desktop PC systems and suitable for operation on single phase 230 V, 50 Hz AC supply.	6 sets		