



सत्यमेव जयते

Government of India
Bhabha Atomic Research Centre
ELECTRON BEAM CENTRE
Rain Tree Marg, Sector-7, CBD Belapur,
Navi Mumbai – 400 614, INDIA

Sh. R K Rajawat

Head APPD

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Ref. No.: BARC/APPD/EBC/VS/2017/ 351

Date: 22/09/2017

Subject: Invitation of Quotation for “Fabrication of variable output AC power supply”.

Kindly refer to the subject mentioned above. On behalf of President of India, you are invited to quote for carrying out “Fabrication of variable output AC power supply”.

Sl. No.	Description of the work	Qty
1	Fabrication of variable output AC power supply. Given in Annexure-1	02Nos.

Terms and conditions

1. The supplier should quote for fabrication of the items, including the cost of the materials.
2. The material may be inspected before the start of the fabrication.
3. The quotations should have the minimum validity period of two month.
4. Taxes and Excise duties shall be quoted separately. Form AF shall be provided where necessary. Please mention PAN and VAT number in quotation.
5. Supplier should submit their offers in their letterhead, placed in sealed envelope super scribed with the above mentioned Reference No., due date and Title **on or before 16-10-2017 by registered post / speed post through Indian Postal Services** (before 15:00 hours). The quotation should contain the following details like (i) Period of validity, (ii) terms and conditions of offer, (iii) Approximate period of completion of job, (iv) Copies of registration and income tax clearance certificates (v) PAN, GST and registration no.

6. The address on the envelope must read:
“**Quotations for** Fabrication of variable output AC power supply as per specification”

(Attn: “**Vijay Sharma**”) addressed to
“**Head APPD,**
Electron Beam Center, Sector 7,
CBD Belapur, Navi Mumbai-400614”

7. The fabrication of the item shall be subjected to inspection by our Scientists / Engineers at the supplier’s works. Necessary inspection facilities should be provided to them during fabrication at the supplier’s premises. The purchaser has the right to make the minor modifications in the design and drawings. Additional charges will not be admissible for such minor modifications, if any. The item should be delivered to us at **Electron Beam Centre, Kharghar, Navi Mumbai** after approval by our Scientists / Engineers.
8. Please note that shorter delivery period will be preferred. For any clarifications you may contact, Vijay Sharma, APPD, BARC on Tel. 27524570, Fax. 91-22-27524551.
9. Payment will be made only after delivery and installation of the item to the above-mentioned address and approval by our Scientists / Engineers as per BARC rules.
10. Head APPD, BARC, reserves the right to accept / reject any or all quotations without assigning any reason

Approved by

Head APPD, BARC

श्री. आर. के. राजावत / Shri R. K. Rajawat
अध्यक्ष, त्वरक एवं स्पंद शक्ति प्रभाग
Head, Accelerator & Pulse Power Division
भारत सरकार / Government of India
भाभा परमाणु अनुसंधान केन्द्र, मुंबई - 400 085.
Bhabha Atomic Research Centre, Mumbai - 400 085.

Encl:

1. Annexure –I (specifications of work)

CC: A.A.O., Works Section,
Central Complex, BARC.

Annexure-I

Specification of variable output AC power supply are as follows:

- 1.1) The power supply will provide output voltage variable form 0VAC-250VAC @50Hz, current of 4A AC.
- 1.2) A touch screen panel with a suitable Schneider PLC based control is preferred as a controller for the voltage. The graphical touch screen panel used as HMI should will be the operator interface to the power supply for display and control of the output voltage.
- 1.3) The output voltage desired can be set through the HMI and the power supply should generate the voltage in a settable ramp rate to the set value.
- 1.4) The output voltage terminal should always start from zero voltage on power ON to the power supply i.e. the power supply should make the voltage zero before connecting the power source output to the output terminal of the power supply.
- 1.5) The control accuracy of 1volt AC or lessor w.r.t. to set value is required.
- 1.6) The output of the power supply should have an isolation of 1.5kV rms or better and the isolation transformer screen should be grounded.
- 1.7) Isolation transformer test report is needed.
- 1.8) The unit should have MCB based protection at the input and at the output of the power supply.
- 1.9) Input power of 230VAC power will be fed into the unit from rear side of the unit using a suitable rating Amphenol connector male (mounted on the unit), female connected to the power cord feeding the power into the system and 2 meter power chord should be provided.
- 1.10) Output from the power supply will be terminated on the rear panel on a female, panel mounted terminal and a counter connector of male type to take the power to load should also be provided. An EMI filter should also be provided at the input and output of the power supply. The power ON –OFF switch of rotation type (L&T or Schneider make) should be provided on the front face to Turn the power ON/OFF to the unit.
- 1.11) Front/rear face of the instrument (19"subrack) will be pasted with custom designed plastic sticker indicating the functional name of the unit besides indication the port, indicator, switch function .
- 1.12) The wiring and GA diagram of the unit should be provided.
- 1.13) The complete unit should be 19" rack mountable and made from extruded aluminum. The depth should be less than 500mm and the height should be less than 8U preferred.
- 1.14) Voltage, current monitoring, voltage setting, ramp rate setting should be remote controllable on Ethernet on modbus TCPIP protocol.
- 1.15) Complete backup of HMI should be provided.
- 1.16) Full load testing of the power supply should be done at the supplier's premises.
- 1.17) Constant power mode with ramp up power should also be provided.

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