

# Indian Institute of Technology, Delhi

## Centre for Energy Studies

January 28, 2014

### NOTICE INVITING QUOTATION

Quotations are invited for **Mass Flow Controller**, Display and Control Unit and its cables with the following specifications. Please submit duly signed technical and commercial bids (separately) in sealed envelopes, as per terms & conditions specified. The quotations should reach Dr. Ramesh Narayanan, Centre for Energy Studies, Indian Institute of Technology, Delhi, Hauz Khas, New Delhi – 110016 latest by February 11, 2014 by 5:00 p.m. (IST) by post/courier.

The technical specifications desired for the Mass Flow Controller are as follows:

#### **Mass Flow Controller along with display and control unit and suitable cables (Qty: One):**

MFC for gases (Ar, N<sub>2</sub>, Air etc); Full scale flow range: 100 sccm ; control range: 2% to 100% of full scale; typical accuracy:  $\pm 1\%$  of setpoint for 20-100% of full scale and  $< 1\%$  for 2-20% of full scale; resolution: 0.1% of full scale; repeatability:  $\leq \pm 0.3\%$  of reading; response time:  $< 1s$  typically above 10% of full scale; Normal operating pressure differential: 10-40 psid; Maximum inlet pressure: 150 psig; Control valve should be in a normally closed position; leak integrity outboard:  $< 1 \times 10^{-9}$  sccs helium; leak integrity through closed valve:  $< 0.1\%$  of full scale at 40 psig to atmosphere; Valve controls through a compatible controller using digital interface; Wetted material: SS 316L, Fittings compatible with Swagelok type and Viton seals.

#### TERMS AND CONDITIONS

1. Both the technical and commercial bids (sealed separately) should be put into a bigger envelope. The tender number and details should be superscripted on the left side of the outer cover. The Quotations should be valid for 120 days from the due date.
2. The quoted item should be a cataloged item in the company's official catalog/brochure and should have a well-documented manual. The committee reserves the right to scrutinize the said documents and in the event the vendor is not able to satisfy the committee, it reserves the right to disqualify the quote.
3. **User list:** A list of industrial and educational establishments where the items enquired have been supplied must be provided.
4. The Purchase Committee reserves the right to reject any or all offers without assigning any reason.
5. Either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender. If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
6. Bidders should be the manufacturer / authorized dealer. Letter of Authorization from original equipment manufacturer (OEM) on the same and specific to the tender should be enclosed. OEM should be internationally reputed Branded Company.
7. **Delivery and Documents:** Delivery of the goods should be made within a maximum of 08 to 16 weeks from the date of placement of purchase order and the opening of LC.
8. **Prices:** The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges. The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However the percentage of taxes & duties shall be clearly indicated.  
The price should be quoted without custom duty and excise duty, since IIT Delhi is exempted from payment of Excise Duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued on demand.  
**In case of import supply the price should be quoted on FOB Basis only.**
9. **Warranty/Guarantee:** The warranty period should be clearly mentioned with the duration not being less than one year, which will commence from the date of the satisfactory installation/commissioning of the equipment against the defect of any manufacturing, workmanship and poor quality of the components.
10. **Payment:** Payment will be made through wire transfer/irrevocable Letter of Credit (LC) for imports.