E-5

PROCUREMENT OF GOODS UNDER NATIONAL SHOPPING PROCEDURES

COEP/TEQIP-II/CoE-SRES/March2016/NS/26

For

Frequency Response Analyser
Bid Price: Nil/-

E-5 1 NSP/GOODS

PACKET NO: COEP/TEQIP-II/CoE-SRES/March2016/NS/26

INVITATION FOR QUOTATIONS FOR SUPPLY OF

Frequency Response Analyser

1. You are invited to submit your most competitive quotation for the following goods: -

| Sr. | Title /Name | Brief description [Attach separate annexure if | Quantity |
|-----|-------------|--|----------|
| No | of the | necessary for detailed specifications | |
| | equipment | | |
| | /System | | |
| 1 | Frequency | Please refer to the Annexure A | 01 |
| | Response | | |
| | Analyser | | |
| | <i>y</i> | | |

The schedule is as follows

| Date of inviting the quotations | 23/03/2016 |
|------------------------------------|------------------------------------|
| Last date of submitting the sealed | 04/04/2016 [upto 3:00 pm] |
| quotation to TEQIP office, COEP | |
| Opening of the quotations | 04/04/2016 [4:00 pm] |
| Validity of quotation | Min 45 days |
| Delivery Period | 4 months from the acceptance of PO |

2. College of Engineering has received the grants for establishing Center of Excellence in Smart Renewable Energy System under MHRD's Technical Education Quality Improvement Program-Phase II. The said procurement is for this center. This project is World Bank sponsored project. This procurement is being carried out using the National Shopping Process, and will observe the guidelines of Shopping under TEQIP-II.

3. **Bid Price**

- a) The contract shall be for the full quantity as described above and in the annexure. Corrections, if any, shall be made by crossing out, initialing, dating and re-writing.
- b) All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price. However, break- up of the basic price and taxes/duties shall be indicated clearly.
- c) The bidders will be evaluated on the basic price.

- d) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- e) The Prices should be quoted **in Indian Rupees** only.
- 4. Each bidder shall submit only one quotation.

5. Validity of Quotation

Quotation shall remain valid for a period not less than 45 days after the deadline date specified for submission.

6. **Evaluation of Quotations**

The purchaser shall evaluate and compare the quotations determined to be substantially responsive i.e. which

- (a) are properly signed; and
- (b) conform to the terms and conditions, and specifications.

The Quotations would be evaluated considering all items together in this packet.

7. **Award of contract**

The Purchaser shallaward the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.

- 7.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- 7.2 The bidder whose bid is accepted shall be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.
- 8. 80 % Payment shall be made immediately after delivery of the goods. Remaining 20 % payment will be made after successful commissioning and testing of the equipment/system.
- 9. Three years commercial warranty/ guarantee shall be applicable to the supplied goods.
- 10. You are requested to provide your offer in sealed envelope latest by 04thApril 2016. Please indicate "Quotation for Frequency Response Analyser CoE-SRES/ March2016 /NS /01" at the right hand corner of the sealed envelope"

- 11. The bidder has to supply the material within the prescribed date. A penalty as per norms will be imposed for delayed supply upto 6 weeks. Any further delay will automatically terminate the purchase order/contract.
- 12. The supplier requires supplying the store exactly as per the specifications and will be responsible to replace the defective supplies at his risk and cost.
- The Supplier should submit deviation statement if any. The quotations simply mentioning "asper your specification and cost" shall be rejected.
- 14. The supplier should arrange for free demo / working trial of equipment (if required) at the Institute / Manufacturers place as the case may be at suppliers cost. The Purchase Order would be placed subject to satisfactory demonstration of the equipment.
- 15. Commissioning / Installation is at suppliers cost unless otherwise specified.
- 16. Conditional quotation will not be accepted.
- 17. We look forward to receiving your quotations and thank you for your interest in this project.

Name: Prof. B. N. Chaudhari
Principal Investigator
Center of Excellence-Smart Renewable Energy System

Annexure A

Specifications:

The Frequency Response Analyzer with a sinusoidal test signal and plots the magnitude and phase data verses frequency in response of a system to that frequency.

SPECIFICAITONS

The Frequency Response Analyzer is a sophisticated instrument that injects a sinusoidal test signal and measures the response of a system to that frequency on two return signals. It makes swept frequency response measurements that give magnitude and phase data plotted verses frequency. The frequency sweeps can be either logarithmic (for Bode-type plots) or linear. It is used to measure the following:

- 1. Transfer Functions
- 2. Loop Gain and Phase
- 3. Output Impedance
- 4. Audio susceptibility or PSRR
- 5. Input Impedance

Specifications:

| Lower Frequency | 0.01 Hz | |
|---|--|------------------------------|
| Upper Frequency | 30.00 MHz | |
| Signal-level output voltage | 1.25 mV to 1.77 V rms (5 V p-p) | 50 ohm output impedance |
| Power amplifier output voltage | 5 mV to 7 V rms (20 V p-p) | 2 ohm output impedance |
| Power amplifier output current (Fan-cooled) | 0 to 500 mA | |
| Signal output DC offset | +/- 10 VDC | Software adjustable |
| Variable signal with frequency | Graphical control, overlays with data for maximum productivity | |
| Number of Data Points | 10,001 | maximum, software selectable |

| Receiver Input | | | | | |
|-----------------------------|----------------|--------------------------------|--|--|--|
| Receiver Bandwidth | 1 Hz to 1 kHz | Software selectable | | | |
| Sweep Averaging Samples | 1 to 999 | Software selectable | | | |
| Absolute maximum safe input | +/- 15 V | with 1x probes (provided) | | | |
| | +/- 150 V | with 10x probes (provided) | | | |
| | 1000 VAC | with isolation probe accessory | | | |
| Measurable Signal Range | 5 uV to 1.77 V | | | | |
| Input capacitance | 25 pF | | | | |