



National Institute of Solar Energy

(An Autonomous Institution under Ministry of New and Renewable Energy
Government of India)

No. 01/08(01)/2015/NISE-PV
NOTICE INVITING TENDER

On behalf of the Office of Director General, National Institute of Solar Energy (NISE), Gurugram, Haryana, India invites sealed tenders from reputed suppliers of **Spectroradiometer in Solar Cell Characterization Lab for Supply, Installation & Commissioning of One (01) No of Spectroradiometer as per technical sections mentioned in the tender document.**

Tender document may be downloaded free of cost from the website of NISE i.e. www.nise.res.in. The last date of receipt of bids will be 13:00 Hrs on 22nd June 2017 (Thursday).

National Institute of Solar Energy

(An Autonomous Institute of Ministry of New & Renewable Energy)

Gwal Pahari,
Gurugram-Faridabad Road
Gurugram - 122 003; Haryana, India

On the behalf of the Director General, National Institute of Solar Energy, Gurugram, sealed Tenders are invited from reputed suppliers of Spectroradiometer for supply, installation and commissioning of **Spectroradiometer** at NISE Campus as per technical specifications given in the tender document.

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| Notice Inviting Bid (NIT) No | No. 01/08(01)/2015/NISE-PV |
| Scope of Work | Supply, installation and Commissioning of one (01) No of Spectroradiometer at NISE Campus |
| Supply, Installation and Commissioning | As per Technical specification – Annexure 1 |
| Submitting of Tenders | <p>Sealed tenders are to be submitted in two parts i.e. Part-I containing Technical competence/literature along with EMD, and Part-II containing only commercial invoice in a separate sealed envelope, super scribed as commercial bid. Both the technical and commercial envelopes should be kept in a large sized, sealed envelope super-scribed “Supply, installation and Commissioning of Spectroradiometer at NISE Campus” and addressed to:</p> <p>The Director General National Institute of Solar Energy Gurugram – Faridabad Road Gwal Pahari, Gurugram – 122 003 Haryana, India. Tel: +91 124 - 285 3088 / 285 3089/ 257 9084.</p> <p>In case the tenders are submitted by Hand, the same may be dropped at Tender Box kept at Aditya Bhawan (i.e. Old Building) of NISE Campus.</p> |
| Bid Validity | Bids shall be valid for at least 90 days from the date of technical bid opening. |

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| Earnest Money Deposit | <p>Rs. 1,00,000/- Rupees One lakh) (refundable to the unsuccessful bidders without any interest) in the form of account payee Demand Draft / Fixed Deposit Receipt from a commercial bank / Bank Guarantee from a Commercial Bank in an acceptable form to NISE, Gurugram.</p> <p>In case demand draft, the same may be drawn in favor of “National Institute of Solar Energy” payable at Gurugram</p> <p>In case of Bank Guarantee, the same may be provided as per the format given at Annexure-4 of the Tender Document.</p> <p>**Relevant certificate shall be submitted with the bids in case bidder(s) is/are exempted to furnish the EMD**</p> |
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| Client list | The bidders are requested to provide a minimum of 2 (two) previous customers’ details to whom similar equipment has been satisfactorily supplied worldwide. This is mandatory, which needs to be submitted along with the bid. |
| Performance Security | <p>i. Performance Security should be for an amount of 10% (Ten per cent) of the value of the contract.</p> <p>ii. Performance Security may be furnished in the form of an Account payee Demand Draft, fixed deposit Receipt from a Commercial bank, Bank guarantee from a Commercial bank.</p> |
| Delivery time | Within one (01) month from the issue date of Purchase Order |
| Last date for submission of bids | <p>June 22nd, 2017; 13:00</p> <p>(Note : In case this date is declared as holiday by NISE or Govt. of India in future, then next working day shall be the last date for submission of Bids or Technical bid opening)</p> |
| Date of opening of Technical bids | June 22 nd , 2017; 1500 Hrs |
| Opening of Price Bids | The time & date for opening of price bids will be intimated to the technically qualified bidders. |
| Address for Communication | <p>The Deputy Director General (Administration), National Institute of Solar Energy, Gurugram - Faridabad Road, Gwal Pahari, Gurugram - 122 003, Haryana, India.</p> <p>Email: ddgsk.nise@gmail.com, Ph: +91 124-285 3060 (Reception) / 285 3095 (Direct)</p> |

1) INSTRUCTIONS TO BIDDERS

1. Eligibility of Bidders

- (i) The Bidder should be reputed suppliers of sophisticated equipment such as Spectroradiometer having a turnover of not less than Rs 2 Cr during their last three financial years. The proof of turnover and list of clients will be submitted with the technical bids. Such equipment must be of the most recent series/models incorporating the latest improvements in design. The models should be in successful operation for at least one year as on date of Bid Opening.
- (ii) Details of Service Center's located in Gurugram or adjoining areas and information on Service support facilities that would be provided after the warranty period (In the Service Support Form).
- (iii) The Bidder shall be equipped and be able to carry out the Supplier's maintenance, repairs and Spare parts, stocking obligations prescribed by the conditions of the contract.
- (iv) That the adequate and specialized expertise is already available or will be made available following the execution of the contract in the Purchaser's city, to ensure that the support services are responsive and adequate.
- (v) That the Bidder will assume total responsibility for the fault-free operation of equipment and Maintenance during the warranty period and provide necessary maintenance services for three years after end of warranty period if required.
- (vi) Bidders who don't meet the criteria given above or make untrue or false representation in the forms, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, don't properly complete the contract, cause inordinate delays in completion or financial failure, etc. are subject to disqualification.
- (vii) After the expiration of the warranty period, an extended warranty for 3 years shall be quoted separately i.e under optional column.

Note: Submission of the bid only does not suffice for deeming the Order to the bidder; all bidders will undergo a strict scrutiny process to evaluate the bids received by the committee.

2) Technical Specifications

Please refer Annexure – 1 for Technical Specifications of Spectroradiometer

3) GENERAL CONDITIONS OF CONTRACT

1. Codes & Standards: The Spectroradiometer and its components shall comply with the latest edition of the applicable standards.

2. Inspections and Tests: All routine tests & acceptance tests as per relevant standards and specification shall be carried out by the vendor at the premises of the MANUFACTURER. Charges for all these tests for all the equipment & components shall be included. Drawings and production data shall be furnished to the inspectors at no charge basis to the Purchaser. Should

any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject the goods.

3. Commissioning Check Tests/ Performance and Guarantee Test: In addition to the checks and test recommended by the manufacturer, the contractor shall supervise the following acceptance tests to be carried out on each set.

4. Certificate: The vendor shall furnish, at its own cost, test certificate for the various material and equipment as called for. Such certificate shall be from the manufactures for the particular consignment / lot/piece and shall be duly authenticated by respective consultants.

5. Packing: The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

6. Delivery and Documents: Delivery of the goods should be made within **one (01) month** period from the date of placement of purchase order at **National Institute of Solar Energy, Gurugram – Faridabad Road, Gwal Pahari, Gurugram – 122 003, Haryana, India.** Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by cable/telex/fax/e mail/phone the full details of the shipment including contract number, railway receipt number/ AWB etc. and date, description of goods, quantity, name of the consignee, invoice etc. The Supplier shall mail the following documents to the purchaser with copy to the insurance company:

- i) Copies of the Supplier invoice showing contract number, goods' description, quantity, and unit price, total amount;
- ii) Acknowledgment of receipt of goods from the consignee(s) by the transporters;
- iii) Insurance certificate, if any.
- iv) Manufacturer's/Supplier's warranty certificate;
- v) Inspection Certificate issued by the Competent Authority, and the Supplier's factory inspection report; and Certificate of Origin.
- vi) Two copies of the packing list identifying the contents of each package.

The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.

7. Insurance: For delivery of goods at the purchaser's premises, the insurance shall be obtained by the Supplier to an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes.

8. Transportation : Where the Supplier is required under the Contract to transport the Goods to a specified place of destination including insurance, as shall be specified in the Contract, shall be arranged by the Supplier, and the related cost shall be included in the Contract Price.

9. Warranty: The vendors must provide full comprehensive warranty for a period of 12 months (one year) from the date of commissioning or 18 months from the date of dispatch, whichever is earlier. During this period they should provide all spare parts required for repair and maintenance. Warranty should be provided by the original manufacturer.

10. Performance Guarantee: Performance guarantee shall be provided against warranty for a period of one (01) year from the date of commissioning for 10% of contract value plus one month

notice period.

11. Performance Security: Performance Security should be for an amount of 10% (Ten per cent) of the value of the contract in the form of account payee Demand Draft/ Fixed Deposit Receipt from a commercial bank/ Bank Guarantee from a Commercial Bank in an acceptable form to NISE, Gurugram for a period of 60 (Sixty) days beyond Warranty period.

12. Payment: 100% through Letter of Credit against bank documents. All expenses towards this outside the country will be in the scope of the vendor.

13. Taxes and Duties: Suppliers shall be entirely responsible for all taxes, duties, license fees, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser. Being the purchases for scientific purpose, the customs/Excise duty exemptions are applicable.

14. Penalty Clause: If the Supplier fails to deliver the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty (Half percent of contract price per week of delay subject to a ceiling of 5% of final contract price).

15. Applicable Law: The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction in Gurugram, Haryana.

16. FREE MAINTENANCE AND DEFECTS LIABILITY PERIOD OF one year. The vendor service center shall be in Delhi NCR with at least two years of local after-sales Service history in Delhi NCR. Following are the works shall be carried out during the free maintenance period.

- Emergency call back service
- Inspect, clean, where necessary
- Adjustment of machinery
- Replacement of any defective parts

17. Rejection of Tender: Incomplete, conditional, fax, late tenders and tenders without EMD will be summarily rejected. Director General, National Institute of Solar Energy reserves the right to reject any or all the tenders at his discretion without assigning any reason thereafter.

18. Interested bidders are requested to inspect the work site at the address above mentioned and get them acquainted with the nature of work and local conditions that may have a bearing on the rates.

The following forms are to be filled by the bidder as Part of the Technical Part Of The Bid.

- (i) **Performance Statement Form (As per the attached Format)**
- (ii) **Service Support details;**
- (iii) **Manufacturer's Authorization Form**
- (iv) **Certificate of experience of two similar jobs.**

NOTES

- a) NISE, Gurugram reserves the right to accept or reject any or all applications without assigning any reasons..
- b) Offers with incomplete information are liable to be rejected, which may be noted.

The Director General
National Institute of Solar Energy
Gurugram-Faridabad Road
Gwal Pahari
Gurugram – 122 003, Haryana

Technical Specifications of Spectroradiometer for solar cell characterization Lab at NISE:

A Spectro-radiometer ,which measures separately the intensity of irradiation of the light source At each wavelength and presents an integrated picture of the complete measurement is employed for this purpose .It has an input optics for gathering the radiation from specific field of view and delivering it to the monochromatic wavelength unit. The monochromatic unit separates the radiation into its components wavelength and control and logging system defines the data gathering and storing information.

| Technical Specification for Spectro-radiometer: | | |
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| S No | Items | Specification Details |
| 1 | Wavelength | 300 to 1700nm |
| 2 | Spectral resolution | <4nm(300-1100nm)<13nm(>1100 nm) |
| 3 | Response Time(Integration Time) | (.75ms -5sec) |
| 4 | Detectors | Cooled detectors |
| 5 | Power supply(Standards) | Input:100~240V,50/60Hz |
| 6 | Communication | RS232C , USB |
| 7 | Calibration | NIST Traceable calibration |
| 8 | Software | Compatible with Win 7,Win 10 With dedicated laptop |
| 9 | Calibrator | Required |
| 10 | Software control | For automatic response of the result |

| Protection features | | |
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| 4.1 | Over temperature limiters | 1.Protection features for the Spectroradiometer for its high operating condition should be provided 2. Emergency stop |
| 4.2 | AC Shock proof body | Shall be provided. |
| Documentation | | |
| 5.1 | Declaration of conformity for the components used in the Spectroradiometer along with accessories | 1.Documentation and contact details of the customers using the instruments in INDIA |
| 5.2 | Certificate of Examination by manufacturer/company | The inspection report shall be included the following things 1. 1.NIST Traceable calibration Certificate for Spectroradiometer & Calibrator |
| 5.3 | Manual | The Manual shall include the work instructions, configuration, troubleshooting guidelines, mechanical layout and electrical connection diagrams, list of parts used, Operation and maintenance plan shall be |

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| | | provided. |
| 5.4 | Operating Environmental conditions | Temperature (10 to 50) $\pm 5^{\circ}\text{C}$ |
| 5.5 | Warranty | At least 1 year warranty along with the necessary spare parts should be provided. |
| 5.6 | Extended warranty and calibration service (optional) | Additional warranty for another 3 years and onsite calibration charges should be quoted separately. |
| 5.7 | Training of instrument handling | Special 2-3 days hand experience training to be provided |
| <p>Note: Price of additional supplies should be mentioned separately.</p> | | |

No. 01/08(01)/2015/NISE-PV

Performance Statement Form

(For the last three years)

Name of Bidder: _____

| Order No. & Date | Client | Contact person/ phone | Description & quantities of ordered items | Value of order (in Rs Lakhs) | Date of completion | | Satisfactory completion |
|------------------|--------|--------------------------|---|---------------------------------|--------------------|--------|-------------------------|
| | | | | | As per contract | Actual | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

To be attached: Documentary evidence (client's letter or certificate) in support of satisfactory completion of above orders. Minimum 2 Customers

 Signature and seal of the Bidder

 Date

Price Bid Format
(on Company's Letterhead)

Ref No.

Date:

PRICE BID

The Director General
National Institute of Solar Energy (NISE)
Gurugram – Faridabad Highway
Gwal Pahari; Gurugram – 122 003
Haryana

**Subject: Purchasing of Spectroradiometer at NISE Campus –
No. 01/08(01)/2015/NISE-PV**

| S No | Item | Basic Price (in Rs) | AMC Charges for 2 nd Year (Rs) | Taxes (in Rs) | Other Charges (if any) (in Rs) | Total (in Rs) |
|------|--------------|---------------------|---|---------------|--------------------------------|---------------|
| | | | | | | |
| | Total | | | | | |

Amount (in words) Rupees

Signature: _____

Name of the Representative Submitting the Bid:

Designation:

Company Seal

Bank Guarantee Format for Bid Security / EMD

Bank Guarantee No.

Bank Guarantee Amount: **Rs 100,000/-**

Bank Guarantee Cover from: / / 2017 to / / 2017

Last Date of lodgment of Claim: / / 2017

FINIANCIAL BANK GUARANTEE

To

The Director General
National Institute of Solar Energy
Gurgram – Faridabad Road
Gwal Pahari; Gurugram – 122 003
Haryana

Subject: Tender Document for Supply, Installation & Commissioning of 1 No of Spectroradiometer at National Institute of Solar Energy, Gurugram (NIT No: 01/08(01)/2015/NISE-PV)

Dear Sir / Madam,

Whereas M/s (hereinafter called the “Tenderer”) has submitted their offer dated for the **Supply, Installation & Commissioning of 1 No of Spectroradiometer at National Institute of Solar Energy, Gurugram** (hereinafter called the “Tender”) against the Purchaser’s Tender enquiry No. **01/08(01)/2015/NISE-PV**. KNOW ALL MEN by these presents that WE of having our registered office at..... are bound unto **M/s National Institute of Solar Energy, Gurugram** (hereinafter called the “Purchaser”) in the sum of **Rs 100,000/- (Rupees One Lakh Only)** for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this day of 2017.

THE CONDITIONS OF THIS OBLIGATION ARE:

- 1) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- 2) If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-
 - a) If the tenderer fails to furnish the performance security for the due performance of the contract.
 - b) Fails or refuses to accept/execute the contract.

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing the occurrence of one or both the two conditions, specifying the occurred condition or conditions. This guarantee will remain in force up to and including 45 days after the period of tender validity and any demand in respect thereof should reach the bank not later than the above date. Signature of the authorized officer of the bank Name and designation of the officer Seal, name and address of the Bank and address of the Branch.

“Notwithstanding anything contained herein;

- Our liability under this Bank Guarantee shall not exceed **Rs. 100,000/-** (Rupees One Lakh Only).
- This Bank Guarantee shall be valid up to / / **2017**.
- We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only if you serve upon us a written claim or demand on a before / / **2017**(date of expiry of Guarantee). ”

Banker's Authorized Representative(s)

Date:

Place: