



# National Institute of Solar Energy

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

## Tender No. 3/03/003-NISE **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 manufacturers of environmental chambers or electrical companies specialises in repairing of environmental chambers, etc for **Repair and Maintenance of Light Sun Soak Station installed at NISE, Gurugram** as per technical specifications mentioned in the tender document.

Tender document may be downloaded free of cost from the website of NISE i.e. [www.nise.res.in](http://www.nise.res.in). The last date of receipt of bids will be 13:00 Hrs on 31st August 2017 (Monday).

**Tender No. 3/03/003-NISE**  
**National Institute of Solar Energy**

(An Autonomous Institution under Ministry of New & Renewable Energy, Govt of India)  
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 manufacturers of environmental chambers or electrical companies specialises in repairing of environmental chambers, etc for **Repair and Maintenance of Light Sun Soak Station** installed at NISE, Gurugram as per technical specifications mentioned in the tender document.

Notice Inviting Bid (NIT) No	<b>3/03/003-NISE</b>
Scope of Work	<b>Repair and Maintenance of Light Sun Soak Station</b> installed at NISE, Gurugram
Supply, Installation and Commissioning	As per Technical specification – <b>Annexure 1</b>
Submitting of Tenders	<p>Sealed tenders are to be submitted in two parts i.e. <b>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.</b> Both the technical and commercial envelops should be kept in a large sized, sealed envelope super-scribed “<b>Repair and Maintenance of Light Sun Soak Station installed at NISE, Gurugram</b>” 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 3003 / 285 3089.</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> <p>Note: the company particulars should be written on the Main envelop cover containing clear Correspondence Address, EMD details (if any) , valid Email ID and Phone No.</p>
Bid Validity	Bids shall be valid for at least 120 days from the date of technical bid opening.
Earnest Money Deposit	Nil

Client list	The bidders are requested to provide a minimum of 2 (two) previous customers' details to whom similar repair and maintenance has been satisfactorily carried out. 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 initially for a period of 15 months, and upon repair, it shall be ensured that the Performance Security shall be valid till 12 months period from the date of commissioning of the Light Sun Soak station upon repair.</p>
Time Duration for Repair and Maintenance	Within one (01) month from the issue date of the Work Order
Last date for submission of bids	August 31, 2017; 13:00 Hrs  (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)
Date of opening of Technical bids	August 31, 2017; 15:00 Hrs
Opening of Price Bids	The time & date for opening of price bids will be intimated to the technically qualified bidders.
Address for Communication	The Deputy Director General (Administration), National Institute of Solar Energy, Gurugram - Faridabad Road, Gwal Pahari, Gurugram - 122 003, Haryana, India.  Email: <a href="mailto:ddgsk.nise@gmail.com">ddgsk.nise@gmail.com</a> , Tel : +91 124 285 3060 (Reception) / 285 3095 (Direct)

## 1) INSTRUCTIONS TO BIDDERS

### 1. Eligibility of Bidders

- (i) 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.
- (ii) That the Bidder will assume total responsibility for the fault-free operation of equipment and necessary maintenance services .
- (iii) An AMC extended warranty for 1 year shall be quoted separately i.e. under optional column.

**Note:** Submission of the bid only does not suffice for deeming the Work 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 Light Sun Soak Station installed at National Institute of Solar Energy, Gurugram and Vendors/ company may visit the National Institute of Solar Energy, Gurugram before summing the bids.

## 3) GENERAL CONDITIONS OF CONTRACT

1. **Time Duration for Repair and Maintenance:** The Repair shall be carried out within one (01) month from the issue date of the Work Order with due care, and AMC shall be carried for one (01) year period from the date of commissioning of the Light Sun Soak station upon repair.
2. **Performance Security:** Performance Security should be provided before the start of repair 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 initially for a period of **15 months**, and upon repair, it shall be ensured that the Performance Security shall be valid till 12 months period from the date of commissioning of the Light Sun Soak station upon repair.
3. **Payment:** 80% of the payment shall be released via electronic transfer upon completion of Light Sun Soak Station and upon submission of Inspection Report by the NISE Committee, and the remaining 20% shall be released upon completion of 1 year period of maintenance from the date of commissioning of the station (i.e. after Repair). The bidder has the option of availing upto 50% of the contract value as mobilization advance against submission of Bank Guarantee for the same amount.
4. **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.
5. **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).
6. **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.

**7. 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.

**8. Relaxation of Norms for Start-Ups and Micro & Small Enterprises in Public Procurement:** Based on Public Procurement Policy for Micro and Small Enterprises (MSEs) Order - 2012, and based on MSME Policy Circular No. 1(2)(1)/2016-MA dated 10 March 2016, suitable relaxation on prior turnover and prior experience with respect to Micro and Small Enterprises shall be provided subject to meeting of the quality and the technical specifications.

**9.** 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 Dy Director General (Admn)  
National Institute of Solar Energy NISE)  
Gurugram-Faridabad Road  
Gwal Pahari;  
Gurugram – 122 003  
Haryana

Tel: 0124 285 3095

## Technical Specifications of Light Sun Soak Station installed at National Institute of Solar Energy (NISE), Gurugram

### Sub: Repair and Maintenance (for one Year) of Light Sun Soak Station installed at National Institute of Solar Energy, Gurugram (NIT No: 3/03/003-NISE)

It is required to repair and maintain (for one year) the light sun soak station installed at NISE workshop Gurugram. The technical specification of the light soak station equipment are as follows:

#### 1.0 System Specifications:

<b><u>SYSTEM SPECIFICATIONS</u></b>		
<b>Sl.No.</b>	<b>Features</b>	<b>Description</b>
1	Max Exposure Area	3000mm X 3000mm
2	Insolation Uniformity	+/- 10%
3	Class Of the Equipment	Class B
4	Light Source	Xenon HID Lamps closely matching the solar spectrum
5	Illumination Uniformity	+/-10%over 3000mmX3000mm area
6	Reference Pyranometers	Four NOs of Calibrated Silicon Pyranometer of Apogee Make.
7	Variable Insolation	50-100mW/Cm2, measured by calibrated Pyranometer
8	Temperature Control Range	40-55 Deg Centigrade with +/-2% accuracy
9	Insolation Display	Instantaneous display in mW/cm2 And Integrated KWHrs dose
10	Computer Interface	Standard-RS232 Interface Provided for storage, retrieval and printing of IV data with user-friendly software for computer control.
11	Operating Systems	MS Windows 98/XP
12	Dimension	Unit Area of 4000mm X 4000mm. X 3000mm
13	Power	Phase 3 – AC415V/50Hz/120Amps 40KVA Max Rating

## 2.0 System Specifications

### SYSTEM ORGANIZATION

System organization is done by providing computer interface to the sun soaking station. Some operations are manual and some are under computer control.

Manual operations include system power up, opening the front door placing the modules to be soaked inside the chamber.

The IO control of the system is performed by various electronic boards used for monitoring and control of the system.

Following is the brief description of the various boards used in the system

#### Electronic Boards

Ser No	Board Name	Function
1	3PH340PCB	Monitors the three phase voltage and currents. Silabs 89C51F340 micro-controller is used for monitoring the AC voltage and currents.
2	IO1PCB	ON/OFF control of the IO devices. Silabs 89C51F340 micro-controller is used for controlling the IOs.
3	4MLXPCB	IR Temperature Sensor Signal conditioning. Silabs 89C51F340 micro-controller is used for interfacing MLX90614 IR Temperature Sensors
4	4TCPCB	Insolation Measurement. Silabs 89C51F350 micro-controller is used for monitoring Insolation interfacing the Apogee Make Pyranometers.
5	DISPLAYCPU	Display Controller. Silabs 89C51F340 micro-controller is used for controlling the insolation display.
6	DISPLAYBOARD	LED Display Board.
7	M8PP1CH	Power Oscillator for powering the Local PCBs. Atmel Mega8 micro-controller is used for controlling the Power Oscillator.

**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

**Sub: Tender Document for Repair and Maintenance (for 1 year) of Light Sun Soak Station installed at National Institute of Solar Energy, Gurugram (NIT No: 3/03/003-NISE)**

S No	Item	Basic Price (in Rs)	Taxes (in Rs)	Other Charges (if any) (in Rs)	Total (in Rs)
1.	Repair and Maintenance (for one year) of Light Sun Soak Station installed at NISE, Gurugram				
	<b>Total</b>				

Amount (in words) Rupees

Option Quotation: AMC Charged for 2<sup>nd</sup> Year:

S No	Item	Amount in Rs	Taxes (in Rs)	Other Charges (if any) (in Rs)	Total (in Rs)
1.	AMC Charges for 2 <sup>nd</sup> Year				
	<b>Total</b>				

Amount (in words) Rupees

Signature: \_\_\_\_\_

Name of the Representative Submitting the Bid:

Designation:

Company Seal