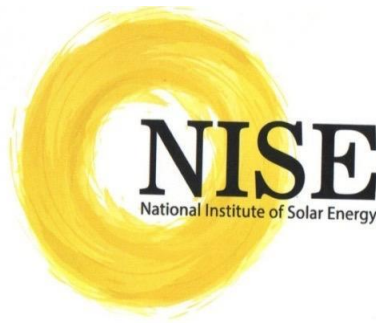


# **Re-Tender Document**

For

**Supply, Installation & Commissioning of Electrochemical Capacitance Voltage (ECV) Profiler at National Institute of Solar Energy, Gurugram, Haryana.**



**NIT NO: 9/03(2)006/2018-NISE PV (R&D) Part A.**

**The last date of receipt of bids: 1<sup>st</sup> November, 2018 at 13:00 Hrs.**

**NATIONAL INSTITUTE OF SOLAR ENERGY**

**Gurgaon-Faridabad Road, Gwalpahari, Gurugram, Haryana-122003, INDIA**

**Contact Telephone No.: +91-124- 2853001/2853114/2853120**

**Website: [www.nise.res.in](http://www.nise.res.in)**

# National Institute of Solar Energy

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

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

On behalf of the Office of the Director General, the National Institute of Solar Energy (NISE), Gurugram invites sealed tenders from reputed Manufacturer/ Suppliers of **Electrochemical Capacitance Voltage (ECV) Profiler** for Supply, Installation & Commissioning of an Electrochemical Capacitance Voltage (ECV) Profiler as per the technical sections mentioned in the tender document.

|  |   |
|--|---|
| Notice Inviting Bid (NIT) No           | <b>9/03(2)006/2018-NISE PV (R&amp;D) Part A</b>   |
| Scope of Work                          | Supply, installation and Commissioning of an <b>Electrochemical Capacitance Voltage (ECV) Profiler</b> at NISE Campus   |
| Supply, Installation and Commissioning | As per the Technical specification at <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. <u>All prices should be quoted on the basis of CIF, NISE, Gurugram.</u></b> Both the technical and commercial envelopes should be kept in a large sized, sealed envelope super-scribed <b>“Bid for Electrochemical Capacitance Voltage (ECV) Profiler”</b> at NISE Campus, Gurugram” and addressed to:</p> <p>The Director General<br/>National Institute of Solar Energy<br/>Gurugram – Faridabad Road<br/>Gwal Pahari, Gurugram – 122 003, Haryana, India.</p> <p>In case the tenders are submitted by hand, the same may be dropped in the Tender Box kept at the reception of Surya Bhawan of NISE Campus.</p> <p>Note: the company particulars should be written on the Main envelope cover containing clear Correspondence Address, EMD details, 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             | <p>₹ 1,40,000/- (Rupees One Lakh Forty Thousand Only) (refundable to the unsuccessful Bidders without any interest) in the form of account payee Demand Draft / Bank Guarantee from a Commercial Bank in India in acceptable form to NISE, Gurugram.</p> <p>In case of 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 <b>Annexure-3</b> of the Tender Document.</p> |
| Client list                       | The Bidders are requested to provide a list of clients to whom similar equipment has been satisfactorily supplied (copy of Purchase/Work Order should be attached).  |
| Security/ Performance Guarantee   | The successful bidder should deposit 10% of contract value in form of Demand Draft/ bank guarantee from a commercial bank in India should be provided as security/ performance guarantee valid for a period of 60 days beyond the warranty period.   |
| Delivery time                     | Within 16 weeks from the date of LC opening.   |
| Last date for submission of bids  | <p>1<sup>st</sup> November 2018 at 13:00 Hrs</p> <p>(Note : In case this date is declared as a holiday by NISE or Govt. of India in future, then the next working day shall be the last date for submission of Bids)</p>   |
| Date of opening of Technical bids | 1 <sup>st</sup> November 2018; 15:00 Hrs   |
| Opening of Price Bids             | The time & date for opening of the price bids will be intimated to the technically qualified Bidders.  |
| Address for Communication         | <p>The Deputy Director General (Administration - I)<br/>National Institute of Solar Energy<br/>Gurugram - Faridabad Road, Gwal Pahari,<br/>Gurugram - 122 003, Haryana, India.<br/>Email: <a href="mailto:banerjee.mnre@gov.in">banerjee.mnre@gov.in</a><br/><a href="mailto:chandanbanerjee74@gmail.com">chandanbanerjee74@gmail.com</a><br/>Ph: +91 124-285 3060 (Reception) / 0124-285 3002 (PA)</p>  |

## 1) **INSTRUCTIONS TO BIDDERS**

### 1. Eligibility of Bidders

- (i) The Bidder should be from amongst reputed Manufacturer/ Suppliers of sophisticated equipment such as Electrochemical Capacitance Voltage (ECV) Profiler.

- (ii) Where the Bidder is the supplier, he should submit the authorization/ dealership certificate as well as letter from the principal, authorizing him to quote on his behalf.
- (iii) The Bidders shall provide the details of Service Centers located in India and information on available Service support facilities.
- (iv) The Bidder shall be equipped to carry out repair & maintenance on behalf of the Manufacturer and meet the inventory requirements.
- (v) Bidders who do not meet the criteria given above or make untrue or false representation, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, do not properly complete the contract, cause inordinate delays in completion or financial failure are subject to disqualification.
- (vi) AMC trouble-free operation of the equipment for 2 years after the expiration of the warranty period shall be quoted separately.
- (vii) Submission of the bid alone does not guarantee the award of Purchase Order to the Bidder. All Bidders will undergo a strict scrutiny process for evaluation.

## 2) **Technical Specifications**

Please refer to **Annexure –1** for Technical Specifications of Electrochemical Capacitance Voltage (ECV) Profiler.

## 3) **GENERAL CONDITIONS OF CONTRACT**

1. **Pre-dispatch inspection:** The Purchaser may depute its scientists/ engineers at its own cost to the Manufacturer premises for carrying out the factory acceptance test using calibrated samples of the equipment prior to its dispatch to the Purchaser's premises.
2. **Certificate:** The Bidder shall furnish, at its own cost, test certificate for standard material. Such certificate shall be from the Manufacturer for the particular consignment and shall be duly authenticated.
3. **Packing:** The Manufacturer/ 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 with stand, 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.
4. **Delivery and Documentation:** Delivery of the goods at **National Institute of Solar**

**Energy, Gurugram–Faridabad Road, Gwal Pahari, Gurugram–122003, Haryana, India** should be made within 16 weeks from date of opening of LC. The Manufacturer/Supplier shall mail the following documents to the purchaser with copy to the insurance company within 24 hours of shipment:

- i) Copies of the Manufacturer/Supplier's invoice showing contract number, goods' description, quantity, unit price and total amount;
  - ii) Acknowledgment of receipt of goods from the consignee(s) by the transporters;
  - iii) Insurance certificate, if any.
  - iv) Manufacturer's warranty certificate;
  - v) Inspection Certificate issued by the Competent Authority, and the Manufacturer/Supplier's factory inspection report; and Certificate of Country Origin.
  - vi) Two copies of the packing list identifying the contents of each package.
5. **Insurance:** For delivery of goods at the purchaser's premises, the insurance shall be obtained by the Manufacturer/Supplier to an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destination i.e. NISE, Gurugram) on "All Risks" basis including War Risks and Strikes.
6. **Transportation:** The Manufacturer/Supplier is required under the Contract to transport the Goods from "warehouse to warehouse" (final destination i.e. NISE, Gurugram) and the related cost including insurance shall be included in the Contract Price.
7. **Warranty:** The Bidder must provide full comprehensive warranty for a period of **12 months post installation**. During this period they should provide all spare parts required for repair and maintenance. Along with repair maintenance service within 12 hours of communication of such services, warranty of 1 year from the date of commissioning against manufacturing defects shall be provided. Warranty should be provided by the original Manufacturer.
8. **Security/ Performance Guarantee:** The successful bidder should deposit 10% of contract value in form of Demand Draft/ bank guarantee from a commercial bank in India should be provided as security/ performance Guarantee valid for a period of 60 days beyond the warranty period.
9. **Annual Maintenance Contract (AMC):** The Bidder must quote AMC for 02 years. This AMC will start after completion of 01 year regular warranty period from the date of commissioning of the equipment. **The Bidders who do not quote for AMC shall not be considered for bid evaluation.**
10. **Payment:** 90% through Letter of Credit against bank documents. All expenses towards this outside the country will be in the scope of the Bidder. Remaining 10% after testing & commissioning and acceptance of the system /equipment to the entire satisfaction of the Purchaser.
11. **Taxes and Duties:** Manufacturer/Supplier shall be entirely responsible for all taxes,

GST, license fees, Custom duty (NISE shall provide only Custom duty exemption certificate), all other duties, demurrage charges (if any), road permits, etc., incurred until delivery of the contracted Goods at the Purchaser's premises i.e. NISE, Gurugram.

12. **Customs Duties and clearing charges:** Applicable as per Notification No.51/96-customs dated 23rd July 1996 (as amended by Notification No. 28/2003 dated 01.03.2003 & Notification No. 43/2017 dated 30.06.2017) and as amended from time to time for research purpose only. NISE is entitled to availing Customs Duty exemption at present, wherever applicable, the certificate for which shall be issued as per rules at an appropriate time. Customs duty will be reimbursed as per actuals.
13. **Liquidated Damage:** If the Manufacturer/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 half percent of contract price per week of delay subject to a ceiling of 5% of final contract price.
14. **Applicable Law:** The Contract shall be interpreted according to the laws of the Union of India and all disputes shall be subject to the place of jurisdiction in Gurugram, Haryana.
15. **FREE MAINTENANCE AND DEFECT LIABILITY PERIOD DURING WARRANTY:** The Bidder/ Original Equipment Manufacturer (OEM) shall ensure the following free maintenance services during the warranty period
  - i. Emergency call back service
  - ii. Inspect, clean, where necessary
  - iii. Adjustment of machinery
  - iv. Replacement of any defective parts
  - v. Any other necessary works for equipment functional operation.
16. **Evaluation of Tenders:** Bidders shall be evaluated on the basis of QCBS system (see Annexure-1). Financial bid shall be evaluated based on CIF, NISE, Gurugram inclusive of all charges mentioned at serial no. 5, 6 & 11 of **GENERAL CONDITIONS OF CONTRACT along with** AMC Charges for 2 year period after the regular warranty period.
17. **Rejection of Tender:** Incomplete, conditional, fax, late tenders and tenders without EMD will be rejected summarily. 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.

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

**Technical Specifications for Electrochemical Capacitance Voltage (ECV) Profiler**

| S No. | Parameter                         | Value or Range  | Marks |
|-------|-----------------------------------|---|-------|
| 1     | Etch Step                         | 1 nm to 50 um   | 8     |
| 2     | Doping Sensitivity                | $10^{13}$ to $10^{20}$ cm <sup>-3</sup> or better   | 10    |
| 3     | Depth Resolution                  | 1 nm  | 7     |
| 4     | Carrier Frequency                 | 0.3-25 kHz  | 3     |
| 5     | Modulation Frequency              | 0.1 to 2.55 kHz   | 2     |
| 6     | Sample Size                       | 2 mm <sup>2</sup> to 156 mmx156 mm  | 10    |
| 7     | Calibration                       | Auto  | 5     |
| 8     | Stacked Layers Capability         | Yes   | 10    |
| 9     | Substrate Property                | Conducting or Insulating  | 5     |
| 10    | Capability                        | Si, AlInGaN, other semiconductors   | 10    |
| 11    | Sample Condition                  | Dry In/Dry Out  | 5     |
| 12    | Standard sample                   | To be provided, as per NIST or equivalent certifying agency.  | 5     |
| 13    | Computer                          | Desktop PC with Windows 7 or higher, i5 Processor minimum or equivalent or higher, 1 TB HDD and 4GB RAM                                     | 3     |
| 14    | Monitor                           | 17 " or bigger  | 2     |
| 15    | Essential Spares & Consumables    | One set of essential spares & consumable items to be included in the supply and a list of such items is to be clearly mentioned in the bid. | 5     |
| 16    | Power Supply                      | 220-240 V AC; 50 Hz; Plug as per Indian specifications  |       |
| 17    | Manuals                           | 2 hardcopies in English to be provided; 1 softcopy to be provided as well.  |       |
| 18    | Warranty                          | 1 year after installation   |       |
| 19    | User List                         | List of minimum 3 users with contact information together with satisfactory installation reports to be provided                             | 5     |
| 20    | Annual Maintenance Contract (AMC) | AMC for 2 years to be provided. Cost of AMC will be included in the price for determining the financial score                               |       |
| 21    | Training                          | 4 days' training at NISE to be provided post installation.  |       |
| 22    | Acceptance criteria               | As per item 12, test on standard sample   |       |
| 23    | Delivery Period                   | 16 Weeks after Opening of LC  | 5     |

## Quality Cost Based System

**Step 1:** Technical Bid Evaluation. Awarding raw marks based on marks assigned to each line item in the specifications and totaling of the raw marks. Then, conversion of the raw marks to a grade and corresponding technical score

Grading System:

| Grade         | Marks Range | Technical Score Awarded |
|---------------|-------------|-------------------------|
| Outstanding   | 91-100      | 100                     |
| Excellent     | 81-90       | 90                      |
| Very good     | 71-80       | 80                      |
| Good          | 61-70       | 70                      |
| Very Fair     | 51-60       | 60                      |
| Fair          | 41-50       | 50                      |
| Average       | 31-40       | 40                      |
| Below Average | 21-30       | 30                      |
| Poor          | 11-20       | 20                      |
| Very Poor     | 1-10        | 10                      |
| Zero          | 0           | 0                       |

**Step 2:** Ranking of vendors based on technical score and rejection of vendors having score less than the minimum cutoff.

**Step 3:** Financial Bid Evaluation.

**Step 4:** Conversion of financial bid amounts to scores using the formula

$$\text{Financial Score} = (\text{Lowest Bid}/\text{Vendor's Bid}) * 100$$

Ranking of vendors based on financial scores.

**Step 5:** Calculation of consolidated technical and financial score (CTFS) based on the formula:

$$\text{Consolidated Score} = (70/100) * \text{Technical Score} + (30/100) * \text{Financial Score}$$

Ranking of vendors based on combined technical and financial score (consolidated score) and award of contract to L1 bidder.



**Price Bid Format**  
(On Company's Letterhead)

Ref No.

Date:        /        / 2018

**PRICE BID**

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

**Subject:    Purchasing of Electrochemical Capacitance Voltage (ECV) Profiler at NISE Campus –  
Reg**

Tender No. ....

| S No | Item | CIF, NISE Gurugram<br>inclusive of all charges as<br>mentioned as sl. no. 5, 6<br>& 11 | AMC post<br>warranty inclusive<br>of all taxes for 2<br>Years | Total |
|------|------|--|---|-------|
|      |      |  |   |       |

# AMC period starts after one year of warranty period.

**Note: The Bidders who shall not quote for AMC Charges shall not be considered for bid evaluations. The bids shall be evaluated considering both CIF, NISE Gurugram Price and AMC Charges.**

Amount (in words)

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

Name of the Representative Submitting the Bid:

Designation:

Company Seal

### Bank Guarantee Format for EMD

Bank Guarantee No.

Bank Guarantee Amount: ₹ 1, 40,000/-

Bank Guarantee Cover from: / / 2018 to / / 2018

Last Date of lodgment of Claim: / / 2018

### FINANCIAL BANK GUARANTEE

To

The Director General

National Institute of Solar Energy

Gurugram – Faridabad Road

Gwal Pahari; Gurugram – 122 003

Haryana

**Subject: Tender Document for Supply, Installation & Commissioning of 1 No of Electrochemical Capacitance Voltage (ECV) Profiler at National Institute of Solar Energy, Gurugram, Haryana (NIT No :.....)**

Dear Sir / Madam,

Whereas M/s ..... (hereinafter called the “Tenderer”) has submitted their offer dated ..... for the **Supply, Installation & Commissioning of 1 No of Electrochemical Capacitance Voltage (ECV) Profiler at National Institute of Solar Energy, Gurugram** (hereinafter called the “Tender”) against the Purchaser’s Tender enquiry No.....,KNOW ALL MEN by these presents that WE ..... of ..... having our registered office at..... are bound to **M/s National Institute of Solar Energy, Gurugram** (hereinafter called the “Purchaser”) the sum of ₹ 1,40,000/- (Rupees One Lakh Forty Thousand 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 ..... 2018.

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 security/performance guarantee 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's 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 ₹ 1,40,000/- (Rupees One Lakh Forty Thousand Only)
- This Bank Guarantee shall be valid up to     /     / **2018**.
- 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     /     / **2018**(date of expiry of Guarantee). "

Banker's Authorized Representative(s)

Date:

Place:

## Bank Guarantee Format

**SECURITY/PERFORMANCE BANK GUARANTEE**

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

Bank Guarantee No.  
 Dated:

This deed of Guarantee is made on \_\_\_\_ the day of \_\_\_\_\_ (*write name of the month*), 20 \_\_\_\_ by \_\_\_\_\_ (*Write Bank name which is giving Bank Guarantee*), having branch office at \_\_\_\_\_ (*Write Bank Branch Office address*), ( hereinafter called **“the Bank”** ), which expression shall unless repugnant to the context and meaning thereof includes its legal representatives, successors and assignees and National Institute of Solar Energy, having their office at Gurugram - Faridabad Road, Gwal Pahari, Gurugram – 122 003, Haryana ( hereinafter called **“the NISE”** ) which expression shall unless repugnant to the context and meaning thereof includes its legal representatives, successors and assignees.

Whereas NISE has awarded a supply contract bearing No. \_\_\_\_\_ (*Purchase Order or Work Order No*) dated \_\_\_\_\_ to M/s \_\_\_\_\_ (*Write the Manufacturer/ Supplier Company Name here*), having their Registered office at \_\_\_\_\_ (*Write Company Regd office address*), (hereinafter referred as **“the Manufacturer/ Supplier”**) for \_\_\_\_\_ (*Write the description of the Purchase Order / Work Order*) as per the said order.

AND whereas, the **Manufacturer/ Supplier** has agreed to submit a Security/Performance in the form of a Bank Guarantee for Rs. \_\_\_\_\_ (*Rupees \_\_\_\_\_ Only*) to the NISE as per the Contract valid up to \_\_\_\_ / \_\_\_\_ /20 \_\_\_\_ .

The **Manufacturer/ Supplier** have agreed to perform or fulfill the contract as per terms and conditions of the said order. In case, the Manufacturer/ Supplier fails to perform or fulfill the contract as per the said order, the NISE is entitled to demand an amount equal to Rs. \_\_\_\_\_ ( *Rupees \_\_\_\_\_ Only* ) from the **Manufacturer/ Supplier**.

We, \_\_\_\_\_ (*Bank Name*), do hereby undertake and Guarantee to make payment to the NISE a sum of Rs. \_\_\_\_\_ (*Rupees \_\_\_\_\_ only*) in case the **Manufacturer/ Supplier** fails as per the said order.

Whereas, Bank's liability under this Bank Guarantee is restricted to Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) and it will remain valid till / / 20 . Unless a claim or demand in writing is made against us under this Guarantee before that date, all rights of the NISE under this Bank Guarantee shall be forfeited and the Bank shall be relieved and discharged from all liability there under. This guarantee shall automatically stand cancelled after the date of expiry as stated above notwithstanding the fact that the original guarantee document is returned to us by you or not.

**NOTWITHSTANDING ANYTHING CONTAINED HEREIN:-**

- a) Our liability under this Bank Guarantee shall not exceed to Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only).
- b) This Bank Guarantee shall be valid up to / / 20 .
- c) The Bank is liable to pay the Guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon a written claim or demand on or before / / 20 .

Place.....

Date.....

Signature

Bank Seal

Bank Code No.

**Bank Details for the Purpose of issuing EMD in the form of FDR / BG**

Account Holder Name: National Institute of Solar Energy (NISE)  
Gurugram - Faridabad Highway, Gwal Pahari  
Gurugram - 122 003, Haryana  
Tel: +91 124 285 3056; 3060

Bank Name: **State Bank of India**  
**Branch: State Bank of India – Sector 56, Gurugram**

Address: 45-49 Centum Plaza, Sector 53  
Gurugram - 122 002, Haryana

SB Account No. **33843408697**  
IFSC Code: **SBIN0011443**  
MICR Code: 110002460  
SWIFT Code: SBININBB  
Branch Code: 11443

**NISE GST Details**

NISE full address is:  
**National Institute of Solar Energy**  
Gurugram – Faridabad Road  
Gwal Pahari; Gurugram – 122 003, Haryana

NISE GST No is **06AAAJN0939P1ZR**.  
State Code : 06