

RFQ No. 3/1/CSHP/2017-18/NISE



NATIONAL INSTITUTE OF SOLAR ENERGY

(An Autonomous Institute, Ministry of New & Renewable Energy, Government of India)

Supply, Installation & Commissioning of 7.2kWp Solar Photovoltaic Module Mounting Structure (MMS)

RFQNo. 3/1/CSHP/2017-18/NISE Dt. 29.06.2017

Extension Period of submission of quotations

With reference to the above RFQ No. invited by the office of Director General, National Institute of Solar Energy for Supply, Installation & Commissioning of 7.2kWp Solar Photovoltaic Module Mounting Structure (MMS) posted on 29/06/2017. The last date of submitting the quotations is extended to 31/07/2017. The vendor may submit the Quotation in the tender drop box located at reception counter of NISE Gurgaon or by post by 12.00 noon on 31/07/2017. The quotations will be opened on the same day. The vendor who already submitted the quotation need not to submit again. AMC price quoted shall be optional and treated as separate.

Dy. Director General (Admin)
National Institute of Solar Energy
19th Milestone, Institutional Area,
Gurugram-Faridabad Road, GwalPahari, Gurugram - 122003, INDIA

RFQ No. 3/1/CSHP/2017-18/NISE

NATIONAL INSTITUTE OF SOLAR ENERGY

(An Autonomous Institute, Ministry of New & Renewable Energy, Government of India)



REQUEST FOR QUOTATION

for

***Supply, Installation & Commissioning of
7.2kWp Solar Photovoltaic Module Mounting Structure (MMS)***

RFQNo. 3/1/CSHP/2017-18/NISE Dt. 29.06.2017

Last Date of Submission: 10/07/2017

Dy. Director General (Admin)
National Institute of Solar Energy
19th Milestone, Institutional Area,
Gurugram-Faridabad Road, GwalPahari, Gurugram - 122003, INDIA

Telefax No. : +91-1242853095/ 89

E-mail: ddgsk.nise@gmail.com, Sanjay.mnre@gov.in

Website: www.nise.res.in

**National Institute of Solar Energy UNDP-GEF Concentrated Solar Heat Project
(CSHP) ******

Subject: Supply, installation and commissioning for installation of 7.2kWp PV Module Mounting Structure(MMS) for shading of CST Test facility at NISE, Gurugram.

The important dates and information for quotation are given below in the table:

S.No	Description	Details
1	Request for Quotation (RFQ) No.	3/1/CSHP/2017-18/NISE
2	Tender Type (open/Limited/Auction/EOI/Single)	Limited
3	Tender Issued Through <ul style="list-style-type: none"> • Expressions of interest (EOI) • Request for information (RFI) • Request for proposal (RFP) • Request for quotation (RFQ) • Request for tender (RFT) 	RFQ
4	Tender Category (Services/Goods/works/Supply)	Supply , Installation & commission
5	Scope of Work	Supply, Installation, Commissioning and warranty for 7.2 kWp Module Mounting Structure at NISE
6	Place of submission of quotation and address for communication	Dy. Director General (Admin) NATIONAL INSTITUTE OF SOLAR ENERGY 19 th Milestone, Institutional Area, Gurugram- Faridabad Road, GwalPahari, Gurugram, Haryana, India -122003. E-mail: ddgsk.nise@gmail.com Phone: 0124-2853089/95
7	Period of validity of quotation	Date: 29/06/2017 to 10/07/2017
8	Last date & time of submission of quotation	10/07/2017 by 12.00 Noon
9	Time of Supply & Completion	Within 3weeks after issue of Purchase Order
10	Note	Quotation should be signed and sealed packed super scribed as "Quotation for 7.2kWp Module Mounting Structure" with all supporting documents/credentials in desired formats

1. INTRODUCTION:

National Institute of Solar Energy, an autonomous institution of Ministry of New and Renewable (MNRE), is the apex National R&D institution in the field Solar Energy. The Government of India has converted 25 year old Solar Energy Centre (SEC) under MNRE to an autonomous institution in 23rd September, 2013 to assist the Ministry in implementing the National Solar Mission and to coordinate research, technology and other related works. The institute is involved in demonstration, standardization, interactive research, training and testing solar technologies and systems. It is an effective interface between the Government and institutions, industry & user organizations for development, promotion and widespread utilization of solar energy in the country.

2. Invitation for Quotation:

On behalf of Director General, National Institute of Solar Energy, Gurugram sealed quotations are invited from the technically and financially capable manufacturers/suppliers who are interested to work with NISE for "Supply, Installation and Commissioning of 7.2 kWp Solar Photovoltaic Module Mounting Structure" for shading of CST Test facility at National Institute of Solar Energy, GwalPahari, Gurugram, Haryana, India.

3. INSTRUCTIONS TO MANUFACTURER/SUPPLIERS

Eligibility of Bidders

- (i) The Bidder/Vendor should be reputed Supplier/ fabricator of PV Module Mounting Structure having an annual turnover of not less than Rs 10 Lakhin each financial year during the last two years. Bidders should enclose copy of audited sheets for financial years. Bidder must have sales tax and income tax registration. Copy of PAN Card and GST/ Sales Tax Registration should accompany the quotation. Bidder must have required facilities to manufacture the required items for which the bid is submitted. **The proof of turnover and list of clients shall be submitted with the quotation.**
- (ii) The Bidder/Vendor shall be equipped and able to carry out the Client's maintenance, repairs and Spare parts, stocking obligations prescribed by the conditions of the contract
 - (a) 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.
 - (b) That the Bidder will assume total responsibility for the fault-free operation of equipment / items and Maintenance during the warranty period and provide necessary maintenance services for three years after end of warranty period if required.

- (iii) Bidder/Vendor who does not meet the criteria given above, if they have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, not properly completing the contract, inordinate delays in completion or financial failure, etc. are subject to disqualification.

Note: Only Submission of the bid 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.

4. Technical Specifications of Module Mounting Structure (MMS)

- Site photographs can be referred for installation details of Module Mounting Structure (**Annexure-1**).
- The estimated dimensions of MMS are provided in the attach drawing (**Annexure-2**).
- The modules which will be used in this project are available with NISE. The technical details of the modules are provided in **Annexure-3**.
- Modules are proposed to be installed at a height of greater than 5 meters from ground and modules should be designed for a fixed tilt of 28.45°Deg to take maximum insolation. However this PV plant will be installed for shading purpose therefore the angle of inclination may be reduced until the plant meets the specified shading requirements.
- Hot dip galvanized MS mounting structures shall be used for mounting the modules/ panels/arrays with minimum thickness of coating not less than 80 microns on each side.
- The structure shall be designed to allow easy replacement of any module and shall be in line with the site requirements.
- The Mounting structure shall be so designed to withstand the speed for the wind at Gurgaon where a PV system is proposed to be installed (wind speed of 150 Km/ hour).
- Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed.
- The foundation for module mounting structure shall be preferably 1:2:4 PCC constructions or any other combination based on the local site condition requirement for which design details shall be submitted. Grouting should be 1220 feet below the ground and 457mm above the ground and MMS column post shall be supported with base plate secured to grouting foundation using anchor bolts for easy maintenance/ repair/ replacement. MMS shall support SPV modules at a given

orientation & tilt, absorb and transfer the mechanical loads to the ground properly.

- The MMS stub/ column, rafter, purlin, ties and bracing members shall conform to Indian standards as mentioned in the list of codes and standards: IS: 2062 – Hot rolled Medium and High tensile structural steel IS: 811 – Cold formed light gauge structural steel sections IS: 1161 – Steel tubes for structural purposes IS: 4923 – Hollow steel sections for structural use.
- The minimum specification of various elements of MMS structure shall be as following: Stub/ column- 110 NB (Light) pipe, Rafter- ISMC125, C-Purlin–ISMC 100 and Bracing- ISMC 75.
- Modules shall be clamped & bolted with the structure properly. The material of clamps shall be Anodized Al / Stainless Steel. Clamp/bolt shall use EPDM rubber and must be designed in such a way so as not to cast any shadow on the active part of a module. In case bolts are used, Spring Washers shall be used bolt head end and EPDM rubber shall be used in between Module & purlin.
- For multiple module mounting structures located in a single row, the alignment of all modules shall be within an error limit of maximum 10mm.

5. General Conditions of Contract

- a) Inspections and Tests:** All routine test & acceptance tests as per relevant standards and specification shall be carried out by the vendor on the premises of the MANUFACTURER. Charges for all these tests for all the equipment / items & 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.
- b) Commissioning Check Tests/ Performance and Guarantee Test:** In addition to the checks and test recommended by the manufacturer, the contractor shall supervise the acceptance tests to be carried out on each set.
- c) Certificate:** The vendor shall furnish, at its own cost, test certificate for the various material and equipment / items as called for. Such certificate shall be from the manufactures for the particular consignment / lot/piece and shall be duly authenticated by respective consultants.
- d) Packing:** The Supplier shall provide such packing of the Goods as is required to prevent the 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.

- e) **Delivery and Documents:** Delivery of the goods and completion of works should be made within **(3 weeks) three Weeks** from the date of placement of purchase order at **National Institute of Solar Energy, Gurugram – Faridabad Road, GwalPahari, 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.

- f) **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.
- g) **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.
- h) **Warranty:** The vendors must provide full comprehensive warranty for a period of 12 months (one year) post installation. During this period they should provide all spare parts required for repair and maintenance. Along with repair maintenance service within 12 hrs. of communication of such services, warranty of one year against manufacturing defects shall be provided. Warranty should be provided by the original manufacturer.
- i) **Performance Guarantee:** Performance Guarantee in the form of Bank Guarantee shall be provided against the warranty period of up to one (01) year for 10% of contract value.

- j) Payment:** 100% against delivery, Installation testing & commissioning and acceptance of the system /equipment / items to the entire satisfaction of the Purchaser.
- k) 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.
- l) 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).
- m) 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.
- n) Free maintenance and defects liability period of one year.** The vendor service center shall be in Delhi NCR with at least one year 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
- o) Rejection Terms:** Incomplete, conditional, fax, late quotation will be rejected summarily. Director General, National Institute of Solar Energy reserves the right to reject any or all the quotations at his discretion without assigning any reason thereafter.
- p) Interested Bidder/Vendor** 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/documents are provided by the bidder/vendor.

- (i)** Performance Statement Form (As per the attached Format No.04)
- (ii)** Service Support details;
- (iii)** Manufacturer's Authorization Form
- (iv)** Certificate of experience of minimum two similar jobs / Client List.

- (v) Turnover for the past 02 years (Profit/Loss Account/ Balance/Sheet).
- (vi) Price Bid (As per the attached Format No.05)

q) Site Survey: Interested parties/ Vendors are requested to inspect the work site at the address mentioned above and get them acquainted with the nature of work and local conditions that may have a bearing on the rates.

NOTES

- a) NISE, Gurugram will evaluate all the options and activities mentioned above and reserve the right to award the contract for the most feasible and cost effective option and activities.
- b) NISE, Gurugram reserves the right to accept or reject any or all applications without assigning any reasons.
- c) Offers with incomplete information are liable to be rejected, which may be noted.

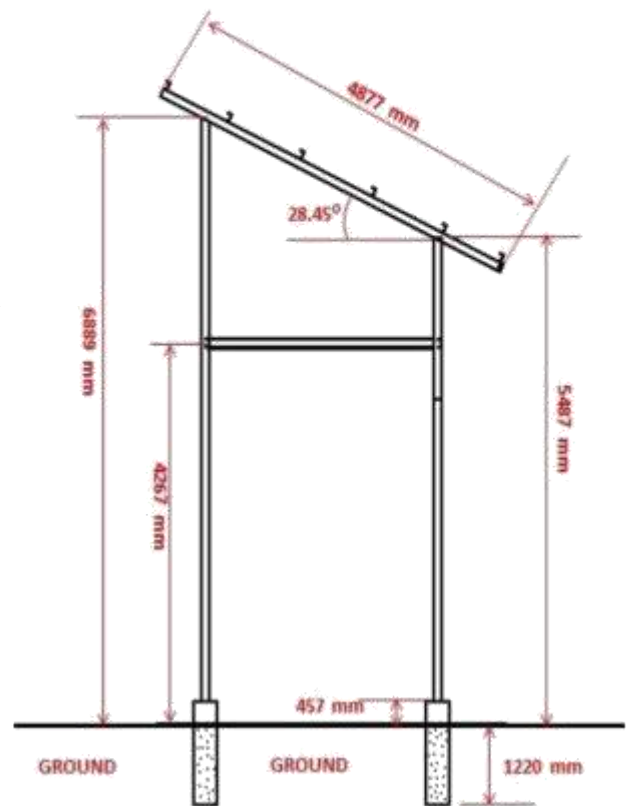
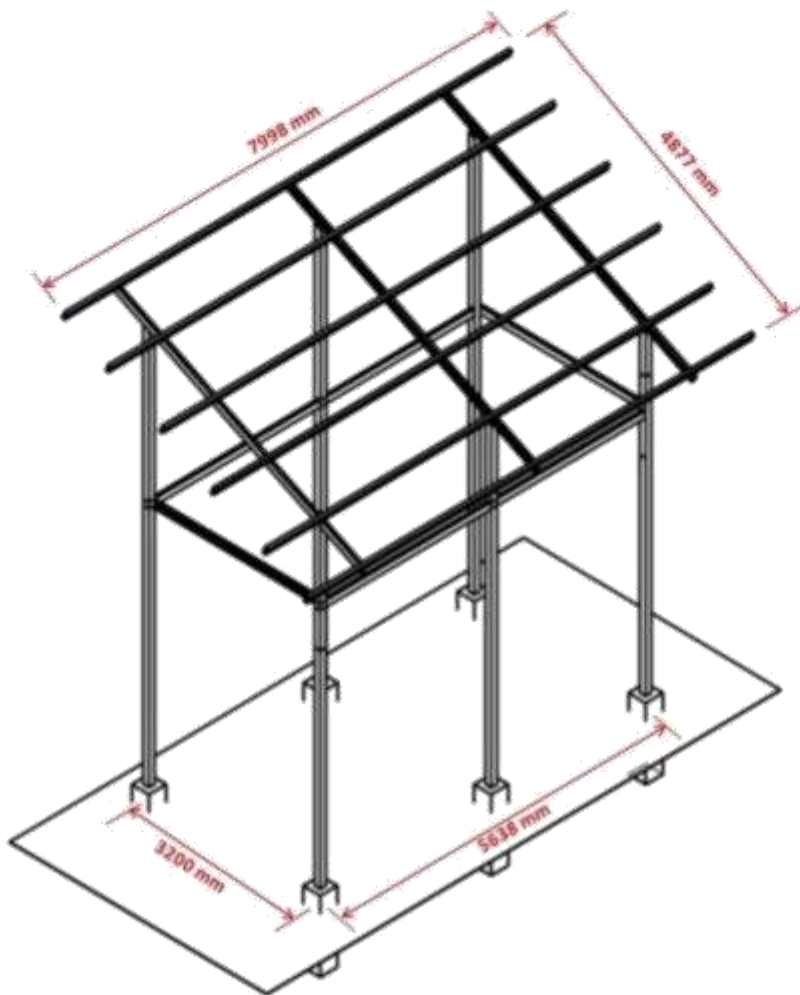
Deputy Director General (Admin)
National Institute of Solar Energy
Gurugram-Faridabad Road,
GwalPahari Gurugram – 122 003,
INDIA

(Annexure-1)

CST TEST RIG PHOTOGRAPHS



(Annexure-2)

Module Mounting Structural Drawing:**Technical Specification of Structure Component**

Component	Specification
Column	110 NB (Light) pipe
Rafter	Rafter- ISMC125
C-Purlin	C-Purlin- ISMC 100
Bracing	Bracing- ISMC 75

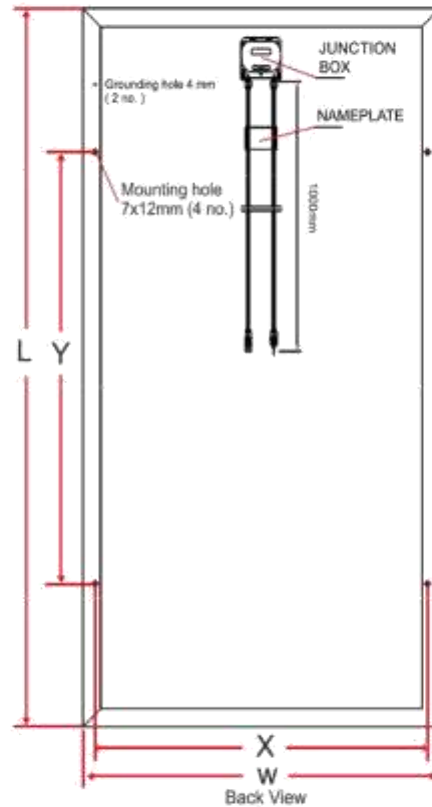
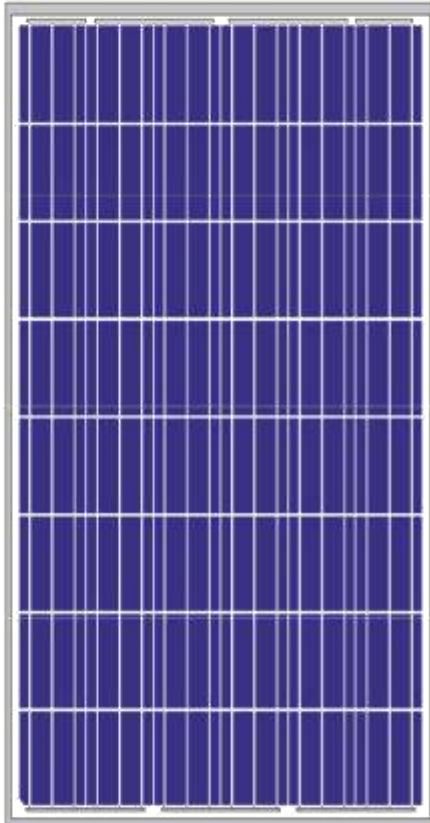
(Annexure-3)

Solar Panel Details (SSGS- 300 Wp)

Total Modules Available with NISE : 24 No's x 300 Wp

Electrical Data:-

1. Peak Power Watt-Pmax (Wp) : 300
2. Maximum Power Voltage-Pmax : 37.00 V
3. Maximum Power Current – Imp : 8.11 A
4. Open Circuit Voltage (Voc) : 45.00 V
5. Short Circuit Current (Isc) : 8.75 A



Side View T

Mechanical Data:-

1. Solar Cells per Module (Units): 72 Nos.
2. Polycrystalline Solar Cells Size : 156.75 x 156.75 mm
3. Length(L) x Width(W)x Thickness (T) : L = 1966 mm
W= 991mm
T = 35 mm
4. Module Holes Pitch (X) : 957 mm
5. Module Holes Pitch (Y) : 983 mm
6. Weight : 22 kg

No. 3/ 1/ CSHP/ 2017- 18/ NISE**Performance Statement Form**

(For the last Two years)

Name of Bidder/Vendor: _____

Order No. & Date	Client	Contact Person/ Phone	Description & quantities of ordered items	Value of order (in Rs Lakhs)	Date of Completion		Satisfactory completed on
					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

(Annexure- 5)

Price Bid Format

(On Company's Letterhead)

Ref No.

Date:

PRICE BID

The Deputy Director General (Admin)
National Institute of Solar Energy (NISE)
Gurugram – Faridabad Highway
GwalPahari; Gurugram – 122 003, INDIA

Subject: Supply, Installation, Commissioning and warranty for 7.2 kWp Module
Mounting Structure at NISE-No. 3/ 1/ CSHP/ 2017- 18/ NISE

S No	Item	Basic Price (in Rs)	AMC Charges for each Year (Rs)	Taxes (in Rs)	Other Charges (if any) (in Rs)	Total (in Rs)
	Total					

Amount in words (Rs.)

Signature:

Name of the Representative Submitting the Bid:

Designation:

Company Seal

Format for submission of Bidder/ Vendor Data

1.	Name of vendor	
2.	Registered Address	
	Phone No. Fax No.	
	Name of Proprietor/ CEO/Chairman	
	Phone/Mobile No. Email id	
3.	Factory Address	
	Phone No. Fax No.	
	Email id	
4.	Delhi/NCR Address (if any)	
	Phone No. Fax No.	
	Email id	
5.	Correspondence Address	
6.	Name of Contact Person	
	Designation Phone/Mobile no.	
	Fax No. Email id	
7.	Website	

8.	Sales Tax related information/ GST	
	TIN No.	
	L.S.T. No.	
	C.S.T. No.	
	Sales Tax Exemption No. (if any)	
9.	Income Tax related information	
	PAN No.	
	PAN reference no. (in case PAN applied for)	
	PAN Status (in case PAN applied for)	
10.	Excise duty related information	
	ECC No.	
	Range	
	Collectorate	
11.	Registration No. with Directorate of Industries	
12.	SSI Reg. No. (if Small Scale Industrial Unit)	
13.	Bank related information	
	Bank name	
	Branch name	
	Bank address	
	Bank phone no.	
	Bank fax no.	
	Bank MICR Code (9 digit)	
	RTGS-IFC Code	
	Account type	
	Account no.	
	Swift Code	

I certify that the information given herein is correct to the best of my knowledge and belief.

Signature of
Proprietor/CEO/Chairman
Seal of the company/concern