

BID DOCUMENT

FOR

Design, Fabrication, supply, installation and commissioning of High
voltage programmable Power supply



NIT NO: 1/12(02)/2015-NISE PV

DUE ON: 15/02/2016

at

NATIONAL INSTITUTE OF SOLAR ENERGY (NISE)

19th Milestone, Institutional Area,

Gurgaon-Faridabad Road, Gwal Pahari, Gurgaon-122003, Haryana,

INDIA

Telefax No. : +91-124-2579207

F.No.-01/12 (02)/2015-NISE PV
National Institute of Solar Energy
(An Autonomous Institute of Ministry of New and Renewable Energy)
Gurgaon-Faridabad Road, Gwalpahari, Gurgaon 122003 (HR)
Phone: 091-124-2579208, Fax: 091-124-2579207

Date: 14.01.2016

Tender Document

Sub: Tenders for Design, Fabrication, Supply, Installation and Commissioning of High voltage Programmable power supply for PV modules testing at National Institute of Solar Energy, Gwalpahari, Gurgaon, Haryana, India.

On behalf of the Director General (DG), National Institute of Solar Energy (NISE), sealed tenders are invited in two parts (Technical and Commercial offers separately) from reputed manufacturers or their authorized Indian representatives, for Design, Fabrication, Supply, Installation and Commissioning of High voltage power supply for PV modules Testing at the National Institute of Solar Energy, Gwalpahari, Gurgaon, Haryana, India. The manufacturer should be a globally reputed company and should have sufficient experience in Design & Fabrication of High voltage power supply for PV modules. Preference may be given to the manufacturers having their authorized repair & service center(s) in India and a list of the same should be supplied along with the bid document. A list of actual users/ customers of the same or the identical equipment should also be furnished along with the Technical Bid.

| | | |
|---|---|--|
| 1 | Tender No. | F.No. 01//12(02)/2015-NISE PV |
| 2 | Details of equipment | High Voltage power supply for testing of PID of Solar PV modules at National Institute of Solar Energy, Gwalpahari, Gurgaon, India. |
| 3 | Quantity | Three set-ups complete with options, accessories, spares and consumables for two years. |
| 4 | Description of High Voltage power supply for testing of Solar modules | High voltage programmable constant power supply for PID test set up of PV modules which can be used to operate (24 X 7 hour) in outdoor module testing lab |

2. SCOPE OF CONTRACT:

The contract should cover the design, fabrication, supply, installation and commissioning of **High Voltage Programmable power supply for testing of solar modules** at the National Institute of Solar Energy, Gwalpahari, Gurgaon (Pin 122003), Haryana, India.

3. SPECIFICATIONS OF HIGH VOLTAGE PROGRAMMABLE POWER SUPPLY FOR PV MODULES

| Specification of Programmable DC Power Supply for 2000 V, 1A | | |
|--|---|---|
| Sr. No. | Parameters | Specification |
| 1. | Output Voltage | 0-2000V |
| 2. | Output Current | 0- 1 A |
| 3. | Output Power | 0-2000W |
| 4. | Cooling | Fan cooling |
| 5. | Operation temp. | 0--50 degree temp |
| 6. | Humidity | 85 % |
| 7. | Accuracy | ±1% of full-scale output |
| 8. | Casing | Rack mount |
| 9. | Remote interface | USB & RS 232/485 |
| 10. | Input Specification | 220 VAC, 50 Hz |
| 11. | Protection | The system should offer protection over voltage, over current, over temperature |
| 12. | PC Software | PC Software should be user friendly include Data logging; Remote Control software; Driver CD should be provided |
| 13. | Line Regulation (0-100%) Voltage & Current Both | ≤ 0.05% |
| 14. | Load Regulation (0-100%) Voltage & Current Both | 0.01- 0.01 - ≤ 0.05% |
| 15. | Ripple and Noise | ≤ 0.05% |
| 16. | Operating mode | Continuous, 24 X 7 |
| 17. | Calibration | Calibration report of the equipment has to be provided from a certified laboratory as per relevant international standard |
| 18. | Connecting Cables | Two sets of cables to be provided for each setup |

4. EARNEST MONEY DEPOSIT (EMD)

A sum of Rs.20,000/- should be submitted as Earnest Money Deposit (EMD) along with the technical bid in the form of nationalized bank's demand draft drawn in favor of "National Institute of Solar Energy payable at Gurgaon". The EMD of the accepted tender will be retained as Security Deposit and the EMD of other unsuccessful bidders would be refunded.

5. RATES

The rates should be quoted specifically on the following lines:

Firm and final cost of High voltage programmable power supply for PV modules with the above specifications and features, including duties, taxes and freight etc. if any applicable, should be indicated separately and clearly. However, certificate towards Customs Duty exemption in terms of Govt. Notification No. 10/97-Central Excise dated 1 march, 1997, if necessary will be issued to the supplier, provided the import is direct on the name of consignee and also the payment is in foreign exchange. Cost involved towards installation and commissioning at site, and Cost towards the training of customer's personnel should be indicated separately. Cost involved towards options, accessories, spares and consumables for operating the system at least for two years should be mentioned separately. A list of spares needed for two years trouble-free operation should be attached along with its cost/prices.

6. DELIVERY PERIOD

The High voltage programmable power supply for PV modules complete in all respects (three set ups) as per specifications above, in a single consignment should be delivered at the site/consignee within 2 months from the date of issue of confirmed supply order/date of opening of Letter of Credit.

7. INSPECTION

The supplier should satisfy himself/herself that the High voltage programmable power supply for PV modules and its spares, if any, fully conform to the specifications by carrying out complete pre-inspection of each component before dispatch. Final inspection will be carried out in the presence of firm's representative/Indian agent when the consignment arrives at National Institute of Solar Energy, an Autonomous Institute under the Ministry of New and Renewable Energy, 19th Mile Stone, Gurgaon-Faridabad Road, Village & P.O. Gwal Pahari, Distt. Gurgaon (Pin-122003), Haryana, India.

8. CONSIGNEE

Director General, National Institute of Solar Energy (NISE), (an Autonomous Institute under the Ministry of New and Renewable Energy), 19th Mile Stone, Gurgaon-Faridabad Road, Village & P.O. Gwal Pahari, Distt. Gurgaon (Pin-122003), Haryana, India. The port of destination is Indira Gandhi International Airport, New Delhi, India and addressed to the consignee.

9. GUARANTEE/WARRANTY

Systems/Spares supplied should be covered by standard terms of warranty for a period of 12 months from the date of installation or 18 months from the date of delivery, whichever is later, for manufacturing defects/performance. During this period, the company should replace/repair the defective parts. The entire expenditure including freight if any for such replacement shall be borne by the firm.

10. PAYMENT TERMS

Payment will be considered against irrevocable Letter of Credit on presentation of the following documents without discrepancies:

- Clean Master Airway Bill/House Airway Bill in original.

- Commercial invoice in quadruplicate.
- Packing list in duplicate.
- Manufacturer's certificate of warranty/guarantee and the inspection and calibration report.
- Certificate of origin.
- Copy of the negotiable bill of binding.
- Address/Tel/Fax number of your banker.

11. PENALTY

The supplier shall supply the stores in accordance with the particulars as expressly specified at the time/times and at the place/places only. The time for and the date of the stores stipulated shall be deemed to be the essence of the supply/work order. If the supplies are not completed within the period prescribed, the supply order will be liable to be cancelled at the risk and cost of the contract besides forfeiting the Earnest Money Deposit. Should the supplier fail to deliver the systems within the period prescribed for such delivery/completion or at any time repudiates the contract before the expiry of such period, the competent authority or the purchaser may without prejudice to his right to recover the damages for breach of the contract/order. If for any reasons the contractor is unable to adhere to the contract delivery dates, he may seek extension in delivery/completion dates well in time by sending a request in writing in this regard to the under signed officer issuing the contract/supply order. The purchaser reserves the right to allow the extension of delivery period subject to such conditions as he may think fit. However, the decision of the purchaser shall be final and binding.

12. DOCUMENTATION:

The supplier will provide drawings, manuals, installation, operation and maintenance, trouble-shooting, circuit diagram etc. of High voltage programmable constant power supply for PV modules to be supplied under the order. The supplier will also supply detailed circuit diagram and installation configuration of the High voltage power supply for PV modules including Do's and Don'ts and training material.

DISPUTES:

In case of any dispute the decision of the Director General, National Institute of Solar Energy (NISE), (an Autonomous Institute under the Ministry of New and Renewable Energy), 19th Mile Stone, Gurgaon-Faridabad Road, village & PO Gwal Pahari, Distt. Gurgaon (Pin-122003), will be final and binding on both the parties. Further dispute, if any will be settled in the Court of Law at New Delhi jurisdiction only.

14. IMPORT LICENSE:

No import license is required for this import as it is being made under OGL for research and development purposes. However, the supplier will be fully responsible for obtaining the required authorization of export from country of origin, if necessary.

15. COMPETENCE:

The supplier should have sufficient experience in manufacturing of electronics test/measurement equipment. Catalogues and company profiles should be enclosed along with the Technical bid.

16. VALIDITY:

Tenders should be valid for 180 days from the date of opening.

17. SUBMISSION OF TENDERS

Sealed tenders are to be submitted in two parts i.e. Part-I containing Technical competence/literature along with Demand Draft for EMD, and Part-II containing only commercial invoice in a separate sealed envelope, super-scribed as commercial bid. Both the technical and commercial bids should be kept in a large size sealed envelope super-scribed as tender for “**High voltage programmable power supply for PV modules**” due for opening on 18.02.2016 and addressed to:

Director General

National Institute of Solar Energy (NISE),

(An Autonomous Institute under the Ministry of New and Renewable Energy),

19th Mile Stone, Gurgaon-Faridabad Road, Village & P.O. Gwal Pahari,

Distt. Gurgaon (Pin-122003)

Haryana,

18. IMPORTANT DATES

a. Closing time and date of receipt of tenders at 12.00 noon on 15.02.2016

b. Opening of Technical Bids at 03.00 PM on 18.02.2015

c. Opening of Financial Bids of technically qualified tenders will be (tentatively) after one week i.e 25.02.2015 at 12.00 PM. In case of any delay the same will be informed to the bidders.

19. It may please be ensured that the main tender envelope should be clearly super-scribed – “**High voltage Programmable power supply for PV modules**”.

(Dr. O.S. Sastry)
DG NISE, Gurgaon