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Electrical Engineering Department
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KANPUR 208016 INDIA

18 Sep 2012.

Dr. RAGHUBIR SINGH ANAND
Principal Research Engineer

To,

All concerned

Subject: **Solar Photovoltaic Training Kit: Tender Notice**

With reference to the subject mentioned above, you are invited to submit the quotation in a sealed cover of following items for Solar Photovoltaic Power Plant Trainig Kit in order to reach us before...5PM, 04 Oct 2012.. in the proforma quotation enclosed herewith in the form of soft copy for your use. The soft copy of the model quotation can also be downloaded from our website placed at the following link http://web.iitk.ac.in/dord/rndforms/project_purchases.php.

1) **Power Conditioning Unit**

To control and monitor the power output of modules. This system controls and measures various parameters like current, voltage, and temperature etc of different components of Solar PV System in different conditions. The unit is composed of following sub units:-

- Potmeter – To draw the I –V curve by varying the load
3 W / 12 Volt
- Charge Controller Unit
12 Volt / 24 Volt Nominal Voltage
15 Amperes Charge Current
15 Ampere Load Current
- Inverter
230 Volt / 150 W Output
10 – 15 Volt input
- Different Meters to measure various parameters:
 - 1) DC Ammeter 20 Ampere and 2 Ampere
 - 2) DC Voltmeter of 20Volt and 200 Volts
 - 3) AC Ammeter 2 Ampere
 - 4) AC Voltmeter 250 Volt
 - 5) Temperature Meter – 100 Centigrade to 200 Centigrade

2) PV Module with Stand – 2 in numbers

This unit is comprised of PV module of 37 Wp and halogen Lamp of 1000 Watt. This unit also facilitates the variation of tilt and altitude of the panel as well as of the power source.

3) Battery

4.5 AH / 12 Volt Battery

4) Load Box


- AC Load
- DC Load

5) Radiation Meter

The quality of training kit should conform to the similar kits already in use in institute of repute like IITs/NITs. A live demonstration of the training kit will be required before the purchase.

Thanks.

Encls: Model Quotation



(RS Anand)

Model Quotation for Imports for the use of vendor

Dated:

To
 Dr./Prof.
 Dept.
 Indian Institute of Technology, Kanpur

Sub : Quotation for supply of :
 Ref : Your enquiry letter no: & date:

Sir / Madam:

With reference to your enquiry letter on the subject mentioned above, the following quotation is hereby submitted for your consideration, in a sealed cover.

II Supplier Details: Agency / Vendor name: Local Agent:

1. Address :
2. Ph.No :
3. Mobile :
4. Email :
5. Bank A/c No :
6. Bank Name & Add. :
7. SWIFT/ IFSC Code :

III. Description & Costs of Material / Equipment:

| Sl No. | Complete description / specification of items required | Model No. | No of Units | Unit Price | Total Amount |
|--------|--|-----------|-------------|------------|--------------|
| 1 | Default Specs: | | | | |
| | | | | | |
| 2 | Optional Specs: | | | | |
| | | | | | |
| 3 | Agency Commissions, if any | | | | |
| 4 | Discounts, if any | | | | |
| 5 | Shipment cost: <ul style="list-style-type: none"> • Ex-Work • Free on Board Value (FOB) • Cost-Insurance-Freight | | | | |

| | | | | | |
|---|--|--|--|--|--|
| | (CIF) <ul style="list-style-type: none"> • Cost & Freight (C&F) • Free Carrier Arrangement (FCA) <i>(Choose one of the above, as applicable)</i> | | | | |
| 6 | Total Cost in INR /US\$ / other currency (specify): | | | | |

IV. Estimated Taxes :

| | | |
|--|------------------------------|--|
| | Taxes: | |
| | • Customs Duty as applicable | |
| | • Service Tax | |
| | • Other duties / taxes | |
| | Total Taxes: | |

V. Freight charges (if not included in shipment costs mentioned above) :

| | Item | Description |
|---|---|--------------------|
| 1 | Freight Value | |
| 2 | Insurance Charges | |
| 3 | Packing and Forwarding Charges | |
| 4 | Documentation charges | |
| 5 | Total Insurance & Freight charges in foreign Currency | |
| 6 | Transportation Charges | |
| 7 | Other Charge, if any | |
| | Total Cost / quotation & Total Equal Value in Indian Rupees approx as on the date (III+IV+V) | |

VI. Terms & Conditions:

| | Item | Description |
|---|--|--------------------|
| 1 | Guarantee/Warranty Yrs. | |
| 2 | AMC Value per annum | |
| 3 | Costs for additional warranty, if any | |
| 4 | No. of Preventive Maintenance Service visits per annum | |
| 5 | Validity period of quotation (Min. 60 days) | |
| 6 | Payment Terms: LC / TT upto US\$ 10K / DD upto US\$ 10K / CAD / Net 30 / Others <i>(Choose one of the above, as applicable)</i> | |
| 7 | Any other details | |

VII: Other information of import:

| Sl No. | Particulars/Specifications | Description |
|---------------|--|--------------------|
| 1 | Country of Origin for Shipment | |
| 2. | City of Origin for Shipment / Port of Shipment | |
| 3. | Port of Landing | |
| 4. | Delivery Period | |
| 5. | Shipment Mode: (a) Air (b) Ship (c) Road (d) Rail (e) Others | |
| 6. | Approximate Dimensions after packing | |
| | Length X Breadth X Height | |
| | Weight | |

VIII) : Certifications & Enclosures for imports:

1. Technical Literature/Catalogue of equipment
2. Authorization letter from Principal Supplier in favour of Indian Agent attached
3. Certification from Agency including agency commission payable
4. Proprietary certificate, as applicable
5. Additional information, if any.

Signature of the authorized signatory

Date & Seal: