

# **TENDER DOCUMENT**

**FOR**

**DESIGN, SUPPLY, INSTALLATION, COMMISSIONING OF SOLAR  
PV POWER PLANT (15 kWp)**

**INCLUDING  
5 YEARS WARRANTEE, OPERATION & MAINTENANCE**

**AT**

**TEZPUR UNIVERSITY, TEZPUR**

**Tender Notice No.TU/11-24/Pur/Qtn/2016-17/257 dated 02.05.2016**



**Tezpur University  
Tezpur, Napam, 784028, Assam**

**Tender Notice**  
Tezpur University, Tezpur, Napam, 784028, Assam  
[www.tezu.ernet.in](http://www.tezu.ernet.in)

**Tender Notice No: TU/11-24/Pur/Qtn/2016-17/257 dated 02.05.2016**

Sealed tenders are invited from reputed manufacturers/developer/authorize dealers of Solar PV systems in the country for Design, Supply, Installation and Commissioning of Solar PV Power Plant (15 kWp) including 5 years Warrantee, Operation and Maintenance at Rooftop of School of Humanities and Social Sciences Buildings of Tezpur University, Tezpur. The tender document can be downloaded from Tezpur University website ([www.tezu.ernet.in](http://www.tezu.ernet.in)). Technical bids of the tenders shall be opened on the date as mentioned below. The date of opening of financial bids shall be communicated after scrutiny of the technical bids. The financial bids of only those bidders who qualify in technical bids shall be opened. The undersigned reserves all the rights to reject any or all the tenders without assigning any reason.

**PARTICULARS OF TENDER**

1	Tender Notice No.	
2	Particulars of the work	Design, Supply, Installation and Commissioning of Solar PV Power Plant (15 kWp Capacity) at Rooftop of School of Humanities and Social Sciences Buildings of Tezpur University, Tezpur, including 5 Years Warrantee, Operation & Maintenance
3	System capacity	15 kWp
4	Period of contract	Till the completion of all the proposed works
5	Tender Fee	₹. 1000/-
6	Last date and time of submission	25-05-2016 up to 3:00 PM
7	Amount of Earnest money	₹. 25000/-
8	Validity of offer for acceptance	3 (Three) months from the proposed date of opening of the Technical Bid
9	Date and time of opening the tender	25-05-2016 at 5:00 PM
10	Place of opening the tender	Office of the Deputy Registrar, Tezpur university, Tezpur, Napam, 784028, Assam, India

Deputy Registrar (GA)  
Tezpur University

## **PART-1**

### **SCOPE OF WORK**

The work shall include Design, Supply, Installation, Commissioning and 5 years of Warrantee, Operation and Maintenance of Solar PV Power Plant of 15 kWp Capacity, at Tezpur University, Tezpur on turnkey basis. The scope of the work shall include:

- A. All works required for proper installation of Solar PV Power Plant including necessary civil works for mounting structures on the roof of the building to install the solar modules shall be done by the bidder/party. The entire work shall be performed on turnkey basis. All the works related to the proper installation and functioning of the systems shall have to be carried out by the bidder/party in the prices offered by the party.
- B. The generated electricity from the PV Power Plant will be utilized in place of grid power for lighting loads in the School of Humanities and Social Science Building, Tezpur University. Necessary electric cable/connection from the PV systems to the PCU shall be supplied by the bidder/party as per the requirement at site.
- C. All the wiring required to energies the propose load shall have to be done by the bidder/party including supply of all required materials. The wiring shall have to be done in concealed conduits.
- D. All necessary electrical wiring from existing electrical distribution box up to PCU of Solar PV Power Plant and back from PCU to distribution box shall have to be done by the bidder/party including supply of all required materials.
- E. Necessary arrangements for storage of batteries of Solar PV Power Plant as per the requirement for proper protection shall have to be done by the bidder/party. Appropriate cabinets for battery banks, with the provision of racks for batteries should also be provided. If required, battery room of the adequate size with proper ventilation shall have to be prepared according to the direction of Engineer, Tezpur University.
- F. After completion of the proposed works, clearances of all temporary works/ materials shall be the sole responsibility of the bidder/party and this shall be removed immediately after the requirement of such temporary work is completed.
- G. General aesthetics & cleanliness in regard to the installation of various systems shall have to be maintained in accordance with the aesthetics of the site.
- H. Arrangement of proper earthing mechanism and lightning arresters should be done at site as per the requirements of the Solar PV power plant.
- I. The party shall supply/install the necessary tools/instruments required for proper operation of the plant and to measure PV array voltage, current, power, solar radiation and all other important performance parameters.
- J. Supply and installation of display board of 6 ft × 4 ft size showing all technical information of the PV power plant shall be done by the party. The matter written on these boards shall be finalized by Tezpur University.
- K. The PV power plant shall be warranted, operated and maintained by the party against any manufacturing/ design/ installation defects for a minimum period of 5 years from the date of commissioning.

- L. Warrantee, operation and maintenance period will include rectification /replacement of all the defective and consumable components/items including batteries. However, all the non-functional parts/ materials/ items replaced during the warrantee, operation and maintenance period shall be the property of the party.
- M. During the 5 year's warrantee, operation & maintenance period, the party will have to make all necessary arrangements for satisfactory operation, maintenance and performance of the Solar PV power plant.
- N. Rectification of all the defects developed in the PV power plant during warrantee, operation and maintenance period shall have to be done by the party promptly, at the most within 7 days from the date of receipt of compliant.
- O. During warrantee, operation and maintenance period, the party shall have to submit annual performance & functionality report to Tezpur University.
- P. During the warrantee, operation and maintenance period, Tezpur University/ users will have all the rights to cross check the performance of the system.
- Q. Tezpur University may randomly pick up its components to get them tested at Government approved test center. If during such tests any component is found not as per the specified technical parameters, Tezpur University will take the necessary action to recover the losses and to black list the firm and the same may be communicated to MNRE and other State nodal agencies. The decision of Tezpur University in this regard will be final and binding on the party.

## PART - 2

### TECHNICAL SPECIFICATIONS

#### 1. PV POWER PLANT CAPACITY AND LOCATION

Solar Photovoltaic Power Plant of 15 kWp will be installed at Rooftop of School of Humanities and Social Sciences Building, Tezpur University, Tezpur.

#### 2. PV MODULES

2.1 Poly or single crystalline silicon module of 250 Wp will be required to use in this project. PV modules must confirm IEC 61215 / IS14286 Standards for module design qualification.

2.2 Each PV module must have RF identification tag (RFID), which must contain the following information

- (a) Name of the manufacturer of Module
- (b) Name of the manufacturer of Solar cells
- (c) Month and year of the manufacturing (separately for solar cells and module)
- (d) Country of origin (separately for solar cells and module)
- (e) I-V curve of each module
- (f) Peak Wattage,  $I_m$ ,  $V_m$  and FF of each module
- (g) Unique Serial Number and Model Number of each module
- (h) Date and year of obtaining IEC PV module qualification certificate
- (i) Name of the test laboratory issuing IEC certificate

RFID shall be mandatorily placed inside the module laminate for the module manufactured after 1st April 2013 onwards.

2.3 PV modules used in solar power plant must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years.

#### 3. BATTERY BANK

The Battery Bank should comply with the relevant BIS standards and it must be Exide make. The battery capacity at C10 should be more than 300 Ah and battery voltage is 240 V with self discharge below than <2% per month at room temperature at the site.

#### 4. BALANCE OF SYSTEM (BOS) ITEMS/ COMPONENTS

The BOS items / components of the Solar PV power plants/systems must confirm to the latest edition of IEC/ Equivalent BIS Standards/ MNRE specifications as specified below:

BOS Item / System	Applicable BIS /Equivalent IEC Standard Or MNRE Specifications	
	Standard Description	Standard Number
<b>Charge Controller/MPPT units</b> (For Solar PV Systems of 20 Wp to 100 kWp capacity)	Environmental Testing	IEC 60068-2 (1,2,14,30)/ Equivalent BIS Std.
<b>Power Conditioners/ Inverters including MPPT &amp; Protections</b> (For Solar PV Systems of 20 Wp to 100 kWp capacity)	Efficiency Measurements	IEC 61683 / IS 61683
	Environmental Testing	IEC 60068-2 (1, 2, 14, 30) / Equivalent BIS Std.
<b>Storage Batteries</b>	General Requirements and Methods of Testing : Tubular Lead Acid /VRLA/ GEL Capacity Test Charge/ Discharge	As per relevant BIS Std.

	Efficiency Self-Discharge	As per relevant BIS Std.
<b>Cables</b>	General Test and Measuring Method: PVC insulated cables for working voltage and UV resistant for outdoor installation	IEC 60227 / IS 694 IEC 60502 / IS 1554 (Pt. I & II)
<b>Switches/Circuit Breakers /Connectors</b>	General Requirements Connectors –safety AC/DC	IEC 60947 part I,II, III / IS 60947 Part I,II,III
<b>Junction Boxes /Enclosures for Inverters/Charge Controllers</b>	General Requirements: Reverse blocking diodes, fuses and Isolators of suitable ratings.	IP 54(for outdoor)/ IP 21(for indoor) as per IEC 529

- In case if the charge controller is in-built in the inverter, no separate IEC 62093 test is required.
- Various components of Solar Power Plant must additionally confirm to the relevant national/international Electrical Safety Standards wherever applicable

## 5. MODULE MOUNTING STRUCTURE

Module mounting structure should be installed on the roof. Modules shall be mounted on a non-corrosive support structures towards due south and at a suitable inclination to maximize annual energy output. Support structure design and foundation or fixation mounting arrangements should withstand horizontal wind speed up to 60 km/hr. Module mounting structure designed to install solar panels should be made of MS hot dip galvanized. Thickness of galvanizing should be 80 µm (Microns). Minimum clearance of Solar panels from roof should be 500 mm. All fasteners used to fix solar panels with module mounting structure should be of SS304. All exposed metallic parts should be properly grounded.

## 6. DISTRIBUTION BOARD

A DC distribution box (DCDB) shall be provided in between PCU and Solar Array. It should be equipped with suitable rating of DC isolators for solar input from array junction box and fuse of suitable rating between PCU and battery. AC distribution board should comply with IP 21 as per IEC529 and should be equipped with suitable rating of MCB between PCU and load. All switches, circuit breakers and connectors should comply with IEC 60947/IS 60947. It shall have meters for measuring Array voltage and Array current.

## 7. MAIN FEATURES & OPERATING MODE

- 7.1 PCU shall operate with solar priority for feeding load and charging batteries.
- 7.2 Grid power shall be the last priority to feed the load. During such time, the PCU shall feed the load directly through grid and shall also charge the batteries. Battery charging through Grid shall be taken up only when batteries are undercharged and solar is not available or insufficient.

## 8. CABLES

Cables running between solar panels and array junction box should be 4 Sqmm copper flexible. Cables running between AJB and DCDB should be of 25 Sqmm copper flexible cable. Cable running between PCU and battery should be 25 Sqmm coppers flexible cable. Cable running between PCU and ACDB should be 6 Sqmm Copper cables. All copper flexible cables should comply with IS651. Color code should be followed for over all wiring i.e. red for positive, black for negative, green for earth.

## **9. FUNCTIONAL REQUIREMENTS**

- 9.1 While installing the solar PV power plant on rooftop, the physical condition of the rooftop should be taken into consideration. There should not be any damage whatsoever to the rooftop due to setting up of the solar PV power plant so that on a later day there is leakage of rain water, etc. from the rooftop. In case small damages are inevitable for erecting the footings for the module mounting structure etc. the rooftop may be given a suitable grading plaster with suitable leak proof compound so as to render the roof entirely leak proof.
- 9.2 The solar PV array must be installed on the roof top in such a way that there is sufficient space on the rooftop for maintenance etc. If the rooftop does not have any access such as stairs or ladder, a proper and safe ladder must be provided to ensure easy access to the rooftop mainly for the purpose of maintenance and inspection.
- 9.3 While cabling the array care must be taken such that no loose cables lie on the rooftop. Cables running from the rooftop to the PCU down below should be made concealed to the maximum extent possible. In no case the cables should be allowed to pass through windows making the windows non operational.
- 9.4 The batteries must remain in full charged condition all the time. The batteries should first charge from the solar array provided there is sun. In case there is no sunshine the batteries should charge from the utility grid supply.
- 9.5 The PCU-Inverter must have intelligent power / load management circuit to work as per the above functional requirements of the system. Good quality and robust PCU-Inverters must be provided with the system so as to ensure more than 95% up time on quarterly basis. The AC output at the inverter end must be properly metered. All such meters should be digital and should be provided in the PCU.

## **10 WARRANTY**

The mechanical structures, electrical works including power conditioners/ inverters/ charge controllers/ distribution boards/ digital meters/switchgear/ storage batteries, etc. and overall workmanship of the PV power plant must be warranted against any manufacturing / design/ installation defects for a minimum period of 5 years. The Warrantee Card to be supplied with the PV power plant must contain the details of the system supplied.

## **11 OPERATION MANUAL**

An Operation, Instruction and Maintenance Manual in English should be provided with the Solar PV Power Plant. The detailed diagram of wiring and connection diagrams should also be provided with the manual.

## **PART - 3**

### **INSTRUCTIONS TO BIDDERS**

#### **A. ELIGIBLE BIDDERS**

The bidder shall provide sufficient documentary evidences to satisfy the following conditions that the bidder:

- [1] Is a registered manufacturers/developer/authorize firm specializes in solar PV systems installation in India and is operational for more than last three years.
- [2] The bidder fulfills the terms and conditions of eligibility to install Solar PV Power Plant strictly in accordance with the directions of Ministry of New and Renewable Energy Government of India.
- [3] Has adequate capacity to perform the works properly and expeditiously within the time frame specified in the tender document. The firm should have installation capacity of more than 50 kW of Solar PV Power Plant till now.
- [4] Has adequate financial stability and status to meet the financial obligations pursuant to the scope of work.
- [5] Has experience of supply, installation and maintenance in the field of Stand-alone/Off-grid Solar PV systems of more than 25 kW cumulative capacities in the last three years. The details must be submitted in the Proforma given in Technical Bid section of the tender document.

#### **B. TENDER DOCUMENT**

- [1] The bidder is expected to examine all the instructions, terms and conditions, specifications, etc as mentioned in the tender document. Failure to furnish all information required in the tender document or submission of a tender not substantially responsive to the tender document in every respect will be at the bidder risk and is likely to result in out-right rejection of the tender.
- [2] The bidder must clearly indicate the name of the manufacturer, types, model & make of each principal item of equipment proposed to be supplied. The tender may also contain details of specifications and other comprehensive descriptive materials in support of technical specifications. The above information may be provided by the bidder in the form of separate sheets, specifications, catalogues etc. Any tender not containing sufficient descriptive material to describe the proposed equipment may be treated as incomplete and hence may be rejected. Such descriptive materials and specifications submitted by the bidder will be retained by Tezpur University. Any deviations from these will not be permitted during the execution of contract, without specific written permission from Tezpur University.
- [3] At any time prior to the due date for submission of the tender or even prior to the opening of the financial bid, Tezpur University may, whether at its own initiative or as a result of a request for clarification/suggestion by a prospective bidder may amend the tender document by issuing a notice.
- [4] The bidder shall furnish the Tender Processing Fess and Earnest Money Deposit (EMD) in the form of Demand Draft from any nationalized bank pledged in favor of 'Registrar, Tezpur



University' as the part of this tender. Tenders without Tender Processing Fee and EMD shall be rejected by Tezpur University as being non-responsive. No interest shall be paid by Tezpur University on the amount of Earnest Money Deposit (EMD).

- [5] Validity of the offer should be Three (03) months from the proposed date of opening of the Technical bid. Tenders without this validity will be rejected. In exceptional circumstances, Tezpur University may solicit the consent of the bidder to an extension of the period of validity of the offer. The request and the response there of shall be made in writing.
- [6] The bidder shall submit all the rates in Indian Rupees only, on the format for Financial Bid of the tender document.
- [7] The bidder are suggested to collect all relevant data regarding the proposed place of work/ site, actual prevailing working conditions, availability of required materials and labor and all other information/ data required for proper completion of the proposed work. If required, the tenderer may pre-visit the site before submitting the tender. Tezpur University shall not entertain any request of bidder for clarifications related to the local conditions and shall bear no responsibility in this regard.

### C. SUBMISSION OF TENDER DOCUMENT

- [1] **The first envelope** should be superscribed as 'Technical Bid' at top of the envelope and name and address of the bidder should be given at the left hand side bottom of the envelope. The first envelope should be addressed to 'Registrar, Tezpur University' shall contain the following: (a) DD of ₹. 1000/- as tender processing cost (b) Demand draft for ₹.25000.00 as EMD (c) Filled in Technical Bid Format and (d) All other documents except the Financial Bid
- [2] **The second envelope** should be superscribed as 'Financial Bid' at the top of the envelope and name and address of the bidder should be given at the left hand side bottom of the envelope. The second envelope should be addressed to 'Registrar, Tezpur University' shall contain the Financial Bid only in the prescribed format.
- [3] The **third envelope** should be superscribed as 'Submission of Bid for supply, installation, commissioning and maintenance of Solar PV power plant at Tezpur University' at the top of the envelope and name and address of the bidder should be given at the left hand side bottom of the envelope. The third envelope should be addressed to 'Registrar, Tezpur University, Tezpur, 784028, Assam' shall contain the first and second envelopes only.
- [4] Bids received after **due date and time** will not be considered. Bids received late due to postal delay or otherwise will not be considered.
- [5] Last IT returns Statement /Valid TIN/ VAT/ Sales tax clearance certificate duly attested must be submitted along with the bid.
- [6] All pages of the bid documents must be signed and sealed by the authorized person on behalf of the bidders.

## **D. TENDER OPENING AND EVALUATION**

The procedure of opening of the bid shall be as under

- [1] First envelope in the 'TECHNICAL BID' shall be opened at the time and date mentioned in the notice in the tender by Tezpur University in the presence of bidders, or their authorized representatives.
- [2] Second envelope 'FINANCIAL BID' shall be opened after evaluation of technical suitability of the offers. The date for opening of second envelope (Financial bid) shall be communicated subsequently. Second envelope of only those bidders shall be opened who qualify in the technical bid evaluation. If necessary, the firms may be called for Technical Presentation of their proposal as per the time intimated by Tezpur University.
- [3] Any clarification on the technical specification and commercial terms and conditions may be raised prior to submission of the tender document.
- [4] Deviation of any commercial terms and condition and technical specification shall not be entertained under no circumstances.
- [5] All the bidders shall essentially indicate the break-up of prices as shown in financial bid.
- [6] The tender shall be finalized on the basis of total cost of Solar PV Power Plant including 5 years warrantee, operation and maintenance.
- [8] Contract should ordinarily be awarded to the lowest evaluated bidder whose bid has been found to be responsive and who is eligible and qualified to perform the contract satisfactorily as per the terms and conditions incorporated in the corresponding bidding document.
- [9] Before placement of the supply order, an agreement shall be signed between Tezpur University and the successful bidder.
- [10] Tezpur University reserves all the rights to reject any or all the tenders, accept any tender in total or in part.

## **PART - 4**

### **GENERAL CONDITIONS OF CONTRACT**

#### **1. DEFINITIONS**

In the deed of contract unless the context otherwise requires:-

- 1.1 **'Tezpur University'** shall mean 'The Registrar' or his representative of 'Tezpur University' and shall also include its successors in interest and assignees. The **'Contractor'** shall mean the **Firm/Bidder/Person (whose tender has been accepted by 'Tezpur University')** and shall include his legal representatives, successor in interest and assignees.
- 1.2 The contract shall be for Design, Supply, Installation & Commissioning the Solar PV power plant (15 kWp capacity) at rooftop of School of Humanities and Social Science Building, Tezpur University, Tezpur including 5 Years warrantee, operation & maintenance and shall be valid till the completion of all the related works.

#### **2. COMPLETION PERIOD**

- 2.1 The work assigned to the contractor shall have to be completed within 02 months from the date of signing the agreement. The work shall have to be completed within the specified time period and shall be binding on the contractor.
- 2.2 In case the contractor fails to execute the said work or related obligations within the stipulated time, Tezpur University will be at liberty to get the work executed from the open market at the risk and cost of the contractor, without calling any tender and without serving any notice to the contractor. Any 'additional cost' incurred by Tezpur University during such execution of the work shall be recovered from the contractor.
- 2.3 The calculation of aforesaid 'additional cost' will be finalized by Tezpur University at its sole discretion. The contractor shall have no right to challenge the mode or amount relating to calculation at any forum. For completion of the work through any other agency, in case some changes are required in terms and conditions of the contract; the contractor shall not have any right to challenge the decision of Tezpur University.

#### **3. LIQUIDATED DAMAGES**

- 3.1 If the contractor fails to perform the work within the time periods specified in the work order or within the extended time period if any, Tezpur University shall without prejudice to its other remedies under the contract, deduct from the contract price as liquidated damage, a sum equivalent to 1% of the price of the un-performed work / services for each week of delay until actual completion of work, up to a maximum deduction of 10%. Once the maximum is reached, Tezpur University may consider termination of the contract.

#### **4. WARRANTEE, OPERATION AND MAINTENANCE**

- 4.1 The contractor shall warrant the Solar PV Power Plant as per applicable standards of quality. Anything to be furnished shall be new, free from all defects and faults in material and workmanship. The contractor shall be in accordance with the specified technical parameters and should be of the highest grade and consistent with established and generally accepted standards for material. It shall be in full conformity with the drawing or samples if any, and shall operate properly, if operable.

- 4.2 After installation of the Solar PV Power Plant at site, the contractor shall ensure satisfactory performance of the equipments for the period of time as specified in the scope of work.
- 4.3 The contractor shall rectify defects developed in the systems within warrantee, operation /maintenance period promptly. In case the contractor does not rectify the defects within 7 days of the receipt of complaint, Tezpur University may restore the system in working condition on contractor's expenses.
- 4.4 Frequent and unjustified delays in rectifying defects may lead to cancellation of the contract, recovery of losses and imposing of additional penalty. In such circumstance Tezpur University shall have the full liberty to recover the losses/penalty from the contractor pending claims, security deposit. The amount of losses/penalty shall be decided by Tezpur University and will be binding on the contractor.

## **5. SPARE PARTS**

The contractor shall make arrangement to maintain a sufficient stock of essential spares and consumable spare parts to ensure proper maintenance of the system promptly.

## **6. LIABILITY FOR ACCIDENTS AND DAMAGES**

During the installation, commissioning, warrantee, operation & maintenance period, the contractor shall assume all responsibilities for direct damages covering all type of accident, injury or property damage caused by manufacturing defects or faulty erection on the systems.

## **7. DUTIES AND TAXES**

All Taxes and duties as prescribed both under Central and State Government sales tax rules would be applicable. The rates/prices mentioned in the technical bid, all applicable taxes, duties & surcharges have to be mentioned separately.

## **8. TOOLS & TACKLES**

The contractor shall provide all necessary tools & tackles for proper execution of work and operation/maintenance of systems after erection. Tezpur University shall in no way, responsible for supply of any tools & tackles.

## **9. TERMINATION FOR DEFAULT**

Tezpur University without prejudice to any other remedy for breach of contract, by written notice of default sent to the contractor, may terminate the contract in whole or in part:

9.1 If the contractor fails to deliver the services within the specified time period.

9.2 If the contractor fails to perform any other obligation (s) under the contract. However, in the event of termination of the contract in part, the contractor shall continue performance of the contract to the extent not terminated.

## **10. OTHERS CONDITIONS**

10.1 The contractor shall not transfer, assign or sublet the work under this contract or any substantial part thereof to any other party without the prior consent of Tezpur University in writing.

10.2 The offer should indicate the total cost of the system, (Installation, Commissioning and Operation and Maintenance charges) and taxes & duties separately. The total project cost must be inclusive of packing, forwarding, loading & unloading charges, cost of insurance

and transportation FOR destination where the system will be installed as per the work order.

10.3 Fulfillment of various requirements, not particularly mentioned in the specifications or drawings but necessary for satisfactory and proper completion of the work shall be the contractor's responsibility within the prices offered by him.

10.4 The contractor shall not display the photographs of the work and not take advantage through publicity of the work without written permission of Tezpur University. The contractor shall not make any other use of any of the documents or information of this contract, except for the purposes of performing the contract.

## **11. PAYMENT TERMS**

11.1 70% amount of the work value shall be paid after installation and commissioning of the Solar PV power plant at site.

11.2 10% amount of the work value shall be paid after 6 months from the date of installation and commissioning of Solar PV Power Plant at site, provided the plant generates energy at its rated capacity and performs satisfactorily.

11.3 Balance 20% of the contract value shall be treated as performance security and shall be paid against satisfactory performance of the Solar PV Power Plant on yearly basis for 5 years time period, provided the successful operation and maintenance of the plant. 4% payment shall be released after satisfactory every year operation of the plant.

*No price escalation due to any reason (including any change in the applicable taxes, duties, surcharge etc.) shall be considered by Tezpur University during the validity/ extended validity of the contract agreement.*

## **12. APPLICABLE LAW**

The contract shall only be interpreted under Indian laws and The High court of Judicature at Guwahati and Courts subordinate thereto, at Tezpur, shall alone have jurisdictions to the exclusion of all other courts.

Sd/-Deputy Registrar (GA)  
Tezpur University

**PART - 5**  
**GENERAL PARTICULARS OF BIDDER/FIRM**

Sl. No.	Particulars	Details
1	Name of Bidder/Firm	
2	Postal Address	
3	E-mail address for communication	
4	Telephone and/or Fax No.	
5	Name, designation & contact number of the representative of the bidder to whom all references shall be made	
6	Nature of the firm (Individual/ Partnership/ Pvt. Ltd /Public Ltd. Co. /Public Sector etc.) Please Attach attested copy of Registration/ Partnership deed etc.	
7	Amount and particulars of the Tender processing fees	
8	Amount and particulars of the Earnest Money Deposit (EMD)	
9	Sales Tax Registration no.(Copies of Registration Certificates of trade tax/ sales tax to be enclosed)	
10	Has the bidder/firm ever been debarred by any institution for undertaking any work?	

**(Signature of Bidder)**  
**Seal**

**Place:**

**Date:**

## **DECLARATION BY THE BIDDER**

I/We ..... (hereinafter referred to as Bidder) being desirous of tendering for the work, under this tender and having fully understood the nature of the work and having carefully noted all the terms and conditions, specifications etc. as mentioned in the tender document do hereby declare that-

- [1] The bidder is fully aware of all the requirements of the tender document and agrees with all provisions of the tender document and accepts all risks, responsibilities and obligations directly or indirectly connected with the performance of the tender.
- [2] The bidder is fully aware of all the relevant information for proper execution of the proposed work, with respect to the proposed place of works/site, its local environment, and is well acquainted with actual and other prevailing working conditions, availability of required materials and labor etc. at site.
- [3] The bidder is capable of executing and completing the work as required in the tender and is financially capable to execute the tendered work. The bidder is sufficiently experienced and competent to perform the contract to the satisfaction of Tezpur University. The bidder gives the assurance to execute the tendered work as per specifications, terms and conditions of the tender on award of the work.
- [4] The bidder has no collusion with other bidder or with any other person or firm in the preparation of the tender. The bidder has not been influenced by any statement or promises by Tezpur University or any of its employees but only by the tender document.
- [5] The bidder is familiar with all general and special laws, acts, ordinances, rules and regulations of the Government and Tezpur University that may affect the work, its performance or personnel employed therein.
- [6] The bidder has never been debarred from similar type of work by any Government Undertaking /Department.
- [7] The bidder accepts that the earnest money deposit (EMD) may be absolutely forfeited by Tezpur University if the bidder fails to sign the contract or to undertake the work within stipulated time. EMD would be refunded to the unsuccessful bidders after finalization of the bid without any interest.
- [8] This offer shall remain valid for acceptance for 3 (Three) months from the proposed date of opening of the Technical Bid. In exceptional circumstances, Tezpur University may solicit the consent of the bidder to an extension of the period of validity of the offer.
- [9] All the information and the statements submitted with the tender are true.

**(Signature of Bidder)**  
**Seal**

**Place:**

**Date:**

**PART - 6**  
**TECHNICAL BID**

Sl. No.	Details regarding	Proposed by bidder
<b><i>Solar module</i></b>		
1	Name of the manufacturer & Make of Solar Module	
2	Type of Solar Cell	
3	Module Specifications	
4	Type of Frame Structure (MS/SS)	
5	Details in case of any deviation from the technical specifications as specified in the tender document.	
<b><i>Battery</i></b>		
6	Name of the manufacturer & Make of Battery	
7	Model Type	
8	Battery technical specifications	
9	Dimensions of Battery (size)	
10	Details in case of any deviation from the technical specifications as specified in the tender document.	
<b><i>BoS component</i></b>		
11	Name of the manufacturer & Make of PCU/ Inverter	
12	Name of the manufacturer & Make of Charge Controller/ MPPT Units	
13	Name of the manufacturer & Make of Switches/Circuit Breaker/ Connectors/ Wires and cables/Meters/other features	
14	Details in case of any deviation from the technical specifications as specified in the tender document.	
15	Enclosed supporting documents	

*(Attach additional sheets, if required)*

**(Signature of bidder)**

**Seal**

**Place:**

**Date:**



## DETAILS OF EXPERIENCE

Please fill in information about off-grid Solar PV Systems installed in the last three years.

Details	Year			
	2013-14	2014-15	2015-16	Total
Capacity of Solar PV Power Plant installed (in kW)				
Total contract amount (in Rs.)				

*NOTE: Above details without copies of work orders, completion certificates and satisfactory performance reports from the users will not be considered.*

**(Signature of Bidder)**  
**Seal**

**Place:**

**Date:**

**PART - 7**  
**FINANCIAL BID**

<b>Sl. No.</b>	<b>Name of Work</b>	<b>System capacity (kWp)</b>	<b>Amount (in figures)</b>	<b>Amount (in words)</b>
1	Design, Supply, Installation & Commissioning of Solar PV Power Plant of 15 kWp capacity at Tezpur University, Tezpur including 5 Years Warrantee, Operation and Maintenance	15		
2	Taxes & Duties, if any, on item 1 (mention separately).			
3	TOTAL			

Certified that:

- 1 Above rates are in accordance with all the specifications, various terms, conditions and requirements mentioned in this tender document, to perform the work satisfactorily including 5 Years warrantee, operation and maintenance of the solar PV power plant.

**(Signature of Bidder)**  
**Seal**

**Place:**

**Date:**

**PART - 8**  
**FORMAT FOR WARRANTY CARD TO BE SUPPLIED WITH SOLAR PV**  
**POWER PLANT**

SL. No.	Items	Particulars furnished by the bidder
1	Name & address of the manufacturer/ supplier of the system	
2	Date of installation of the system	
3	Details of PV module (s) supplied in the system <ul style="list-style-type: none"> <li>○ Make (Name of the manufacturer)</li> <li>○ Module Serial Number (s)</li> <li>○ Wattage of the Modules under STC</li> <li>○ Warranty valid up to</li> </ul>	
4	Details of Battery Bank <ul style="list-style-type: none"> <li>○ Make (Name of the manufacturer)</li> <li>○ Model batch/Serial number (s)</li> <li>○ Rated Voltage and AH capacity at C10 rate at 20 °C</li> <li>○ Warranty valid up to</li> </ul>	
5	Details of PCU <ul style="list-style-type: none"> <li>○ Make (Name of the manufacturer)</li> <li>○ Model</li> <li>○ Model serial number (s)</li> <li>○ Warranty valid up to</li> </ul>	
6	Details of BOS <ul style="list-style-type: none"> <li>○ Make (Name of the manufacturer)</li> <li>○ Model serial number (s)</li> <li>○ Warranty valid up to</li> </ul>	
7	Designation & Address of the person to be contacted for claiming warranty obligations.	

*(During the warranty period Tezpur University reserves the right to cross checks the performance of the system as per the rated minimum performance specified.)*

**(Signature of Bidder)**  
**Seal**

**Place:**

**Date:**