

**Terms of Reference for submission of
Bids against Tender Notice No.
APEDA/W- /1MW SPV/2015-16**

*Tender Notice No.APEDA/W- 234/1MW Solar Power Plant/2015/5462-74
Dated 8th December 2015.*

Tender Submitted by (Name and Address of bidder)	
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PART-I

Format for Covering Letter

Sir,

I/We hereby submit my/our bid for the work *“Site survey, design, drawing, manufacturing, supply, installation, testing and commissioning of 1 MWp Solar Power Plant at energy awareness park at Itanagar including operation and maintenance for 5 years”* on turnkey basis, as per the terms and conditions of contract that would be decided and drawn with the successful bidder by the Agency for the said work at the rates accepted against each item of work. The articles referred to and described in the attached specification and quantity will be delivered and installed/ commissioned within the time frame and at the decoded location as per the award letter.

I am/ We are remitting herewith the required amount of Rs. 5000/- as application fee vide DD No. dated drawn on bank, Itanagar.

Yours faithfully

Place:

Signature:

Date:

Name:

Designation

(Office Seal)

(This letter is to be submitted on the official letter head of the bidder, signed by the authorized signatory.)

OFFICE OF THE DIRECTOR
ARUNACHAL PRADESH ENERGY DEVELOPMENT AGENCY
URJA BHAWAN, T.T. MARG, ITANAGAR, PAPUMPARE DISTRICT
ARUNACHAL PRADESH – 791 111

No. APEDA/W-234/1 MW Solar Power Plant/2015 / 5462-74 Date: 8/12/2015.

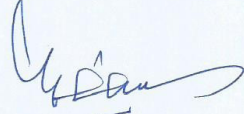
NOTICE INVITING TENDER

Sealed Tenders are invited by Arunachal Pradesh Energy Development Agency (APEDA) in two parts – Part-I (Technical Bid) and Part-II (Price Bid) from reputed manufacturers of SPV systems and Channel Partners empanelled in MNRE, Govt. of India for the turnkey execution of the work of “Site survey, designing, drawing, manufacturing, installation, testing and commissioning including 5 years operation and maintenance of 1 MWp Solar Power Plant at Energy Awareness Park, Itanagar”. Technical Bid will contain all the credentials of the Bidder including commercial terms i.e. proofs and certificates of incorporation of company, being a manufacturer or a Channel Partner, works executed, Balance Sheet, Annual Turnover etc. Price Bid will contain only the Price Bid for the entire scope of work and it will be opened only after opening of the Technical Bids against those who qualify in the Technical Bid. Interested Parties are required to conduct site survey of the area where the plant is to be installed and then design the plant according to the shape and size of the area available. Bids in Part-I and Part-II should be submitted in separate envelopes under a single cover addressed to the undersigned on or before 28/12/2015 up-to 12 noon. Technical Bids shall be opened on same day at 3 pm. Price Bids of those who qualify in the Technical Bids shall only be opened within one week thereafter. The interested parties are requested to refer to APEDA’s website www.apeda.org.in for Terms of Reference for the said work.

Sd/-
Director, APEDA
Urja Bhawan, T.T. Marg, Itanagar,
Arunachal Pradesh – 791 111.

Copy to:

1. The Parliamentary Secy.(Sc.&Tech)-cum-Chairman, APEDA, Urja Bhawan, Itanagar.
2. The Commissioner (Power & NRE), Govt. of AP, Itanagar.
3. The Director, IPR, Govt. of AP, Naharlagun with the request to publish the above NIT in one of the National Dailies and in one of the Local Dailies immediately.
4. All the DDs, APEDA.
5. Notice Board.
6. Website of APEDA.
7. Office copy.


Director, APEDA
Urja Bhawan, T.T. Marg, Itanagar,
Arunachal Pradesh – 791 111.

Abstract

Notification No. : APEDA/W-234/1MW Solar Power plant/2015/5462-74

Date : 08/12/2015

Date and time of submission of bids : 28/12/2015 upto 12.00 noon

Date and time of opening of bids : 28/12/2015, 3.00 Pm

Address of correspondence : C/o Director,
Arunachal Pradesh Energy Development Agency
Urja Bhawan, T.T. Marg, VIP Road, PO Itanagar,
District Papumpare, Arunachal Pradesh,
Pin – 791 111.

Application fee : Rs.5000/-

How to obtain the application form for submitting the bids : To be downloaded from the website of APEDA,
: www.apeda.org.in

Implementation Plan

1. The interested bidders will physically visit the project site at Energy Awareness Park, Itangar and discuss with the APEDA for any clarification and first hand information about the conceptualisation of the project.
2. After site visit, the bidders will do the design and drawing of all the components of the project/ plant according to the area and landscape available at site.
3. In order to minimise the area and to maintain aesthetic look of the park, the modules should be installed in raised structures made of galvanised iron angles/ channels/ flats / pipes of various assorted sizes.
4. The modules shall be installed in a slope as per the angle of tilt and in a single plane on the raised structures.
5. The site for the control room should be decided suitably and designed according to the land / area available and as per the project requirement.
6. Sizing of the step up transformer and substation should be done according to the capacity of the project proposed and for facilitating the power to be fed into the existing 11KV line passing by the side of the project site which belongs to the Department of Power.
7. After designing and drawing, manufacturing and supply of the required equipments will be done immediately and then install and commission the project.
8. All the equipments shall meet the standards and specifications prescribed by statutory bodies of both national and international as applicable. Installation and testing shall also be done by following the set standards and specifications prescribed for the same.
9. After installation, testing and commissioning also, the successful bidder shall have to operate and maintain the plant for 5 years.

Scope and Components of Work

1. Location of proposed project : Energy Awareness Park, Itanagar.
2. Capacity of Project : 1 MWp (1000 KWp)
3. Scope of work :
 - i) Site Visit and Survey.
 - ii) Designing of each and every components of Project.
 - iii) Designing of each and every components of Project.
 - iv) Preparation of drawings
 - v) manufacturing of equipments and accessories.
 - vi) Supply of equipments and accessories
 - vii) Installation
 - viii) Testing
 - ix) Commissioning
 - x) Operation and Maintenance for 5 years
 - xi) Training of APEDA staff and officials in handling/ operation of the project.
4. Main Components of the Project/ Work :
 - i) Solar Modules
 - ii) Modules structures
 - iii) PCU with charge controllers and inverters
 - iv) Step up transformer and power evacuation systems
 - v) GO & DO Switch gears
 - vi) Lightening Arrestors,
 - vii) Earthings and Cablings
 - viii) Control Room
 - ix) Junction Boxes.

Bidding Procedure

There is no Bid Document prepared separately. The interested bidders are required to download or refer to the Terms of Reference hoisted in APEDA's website and submit their bids / offer in Part-I and Part-II.

Part-I: This part should contain the Technical Bid which will contain the technical details of the projects and credentials of the bidders with all necessary supporting documents.

Part-II: This part should contain only the price bid and amount, which may be submitted in the following format shown as below.

Sl. No.	Components of the Project	Quantity	Unit Price	Amount
1	Manufacturing and supply of modules (indicate rating of each module and quantity).	1 lot		
2	Manufacturing and supply of Power Conditioning Unit with Charge Controller and inverter.	1 lot		
3	Manufacturing and supply of mounting structures	1 lot		
4	Manufacturing and supply of earthing equipments and accessories.	1 lot		
5	Manufacturing and supply of connecting cables copper of assorted sizes as required.	1 lot		
6	Manufacturing and supply of step up transformer with all the required switch gears and accessories as required including poles and channels.			
7	Manufacturing and supply of lighting arrestors.	2 sets		
8	Construction of Control Room with RCC frame structures and brick walling of required size.	1 No.		
9	Installation, testing and commissioning of above items/ equipments.	1 lot		
10	Junction Box and connectors.	1 lot		
10	Any other item (mention with details)	1 lot		
	TOTAL			

Bid submission

Bids shall be submitted in two envelopes under another covering envelope:

- i) Part-I – Envelope-A – Technical bid
- ii) Part-II – Envelope-B – Financial/ Price bid

If the bid does not contain the offer in 2 separate sealed envelopes as specified, the bid will be summarily rejected.

Wherever necessary, the formats given may be prepared in separate sheets and attached with the submission. These attachments should be clearly indicated (with flags) in the main document.

Pre-qualification Criteria

1. The Bidder should be an approved Channel Partner of MNRE for Off-Grid Solar Photovoltaic applications, with valid accreditation as on last date of submission of the bid (attested copy of Certificate from MNRE has to be submitted)
2. The Bidder should have a valid CST/VAT/TIN registration certificate (attested Copy has to be enclosed)
3. The Bidder should submit the application fee of Rs.5000/- as DD in favour of Director APEDA payable at Itanagar.
4. The bidder should have already executed at least one SPV power plant of 1MWp capacity or at least 2 (two) SPV Power Plants of 500 KWp each in last three years.

Part-I (Envelope-A)/ Technical Bid.

Envelope-A shall contain the following documents to support Technical Qualification.

- a) Covering letter for submission as per format on firm's letter head
- b) Application fee of Rs.5000/- as DD in favour of Director APEDA payable at Itanagar.
- c) Attested copy of proof of the bidder being approved Channel Partner of MNRE Solar Photovoltaic applications with valid accreditation as on last date of submission of the bid.
- d) Attested copy of proof of being manufacturer of SPV systems.
- e) Attested copy of valid CST/VAT/TIN registration certificate.
- f) Format(s) duly filled up as prescribed wherever given.
- g) Annual Turn Over of the Company with Proof of Annual Turnover as required (e.g. audited statement of accounts)
- h) Copy of registration/ incorporation certificate of the firm.
- i) Authorization or power of attorney as authorized signatory.

- j) Experience in installation of similar type of power plants
- k) Technical compliance certificates for solar modules proposed
- l) Technical compliance certificates for Battery proposed
- m) Technical compliance certificates for Power conditioning unit along with charge controller proposed (if charge controller is a separate unit provide certificates separately)
- n) Make of various major components of the project like module, battery, PCU etc should be clearly indicated as per the format given.

If the Envelope A does not contain the requisite documents as mentioned above specially application fee or/ and the proof of being an accredited Channel Partner of MNRE as on the date of submission, the bid will be summarily rejected.

Only offers that meet the above criteria/ conditions shall be considered for Price Bid Evaluation (Part-II).

Director, APEDA reserves the right to seek any clarification/ additional details from any or all of those who seem to qualify in the technical bid.

Technical Qualification Criteria

1. The minimum average annual turnover required is Rs.5 crores for any of the last two years (Certified Documentary Proof has to be submitted).
2. The system to be installed should be designed in conformity to various standards and specifications of MNRE and BIS as and where applicable.
3. All the components of the system should comply with the minimum technical requirements of solar photovoltaic power plant as specified by MNRE. Technical compliance certificate from the approved laboratory of MNRE to be submitted for the main system components (solar PV module, battery and power conditioning unit) of all the models and brands proposed.
4. The bidder should provide an undertaking that they have resources and capability both financially and technically to supply and install not less than 1MWp Solar Power Plant within 6 months after award of work.
5. If the bidder is not the manufacturer of the major components such as solar PV modules, battery and power conditioning unit (inverter/ charge controller), the authorization letter regarding supply and support, from the respective manufacturers should be enclosed.
6. The bidder shall have to certify that they will operate and maintain the power plant for five years after installation and commissioning.
7. The bidder should have completed at least installations of an aggregated minimum capacity of 5 MW_p solar photovoltaic power plants during last preceding 5 years. Only power plants of capacity 10 kW_p and above would be considered for this. The list of installed systems should be provided as per the enclosed format (Annexure II-C) along with certificate of satisfactory performance issued by the user.

Part-II (Envelope-B)/ Price (Financial) Bid.

If any of the applicants indicate price in Envelopes A, the bid will be summarily rejected. If at least one set of the technical compliance details including test certificates for solar PV modules, power conditioning unit and battery, is not included in Envelope-A, the bid will be rejected. The Price Bid shall be submitted in the following Schedule duly signed.

Sl. No.	Components of the Project	Quantity	Unit Price	Amount
1	Design, Manufacturing and Supply of SPV modules (indicate rating of each module and quantity).	1 lot		
2	Design, Manufacturing and Supply of Power Conditioning Unit with Charge Controller and inverter.	1 lot		
3	Design, Manufacturing and Supply of mounting structures made of galvanized iron angles, channels and pipes.	1 lot		
4	Design, Manufacturing and Supply of earthing equipments and accessories.	1 lot		
5	Design, Manufacturing and Supply of connecting cables (copper) of assorted sizes, Junction Box and connectors etc as required.	1 lot		
6	Design, Manufacturing and Supply of step up transformer with all the required switch gears and accessories as required including poles and channels, GO and DO Switches.			
7	Design, Manufacturing and Supply of lighting arrestors.	3sets		
8	Design and Construction of Control Room with RCC frame structures and brick walling of required size.	1 No.		
9	Installation, testing and commissioning of above items/ equipments.	1 lot		
10	Taxes and Duties (i) CST (ii) VAT			
11	Operation and Maintenance for 5 years.			
10	Any other item not mentioned above if any (mention with details)			
	TOTAL			

Declaration

1. The price quoted by the bidder for each item shall be all inclusive of taxes and duties, and shall cover the pre-installation survey and report, transportation, handling charges, supply, installation and commissioning as per standard installation practices.
2. The price quoted also includes the cost of meeting warranty requirements as per the warranty conditions of the project.
3. The price quoted is applicable for Itanagar, Arunachal Pradsh.

Date

Signature of the authorized signatory
Name
Designation

(Office Seal)

PART-II

Technical requirements

Technical specification

LOAD

The system shall be connected to the existing 11 KV distribution network through a loop-in-loop-out system. It shall be fed to the Arunachal Pradesh State Civil Secretariat Complex. The system should be able to work both in synchronization with the 11KV distribution grid and also in isolation. Arrangement for such facility should be included in the offer. The existing 11KV distribution network is available nearby the proposed area at a distance of about 200 meters.

SPV MODULES

1. Only indigenous modules are allowed to be used. Imported modules do not qualify.
2. The solar PV module should have IEC 61215 / IS14286 qualification certification.
3. In addition, the module must conform to IEC 61730 part-1 requirements for construction & Part-2 requirements for testing for safety qualification.
4. PV modules must also qualify salt mist corrosion testing as per IEC 61701.
5. The PV modules(s) shall contain crystalline silicon solar cells.
6. Shading correction / bypass for optimizing array output is to be incorporated and shading optimization to be provided.
7. Each PV module used in any solar power project must use a RF identification tag (RFID), which must contain the following information. The RFID can be inside or outside the module laminate, but must be able to withstand harsh environmental conditions.
 - a. Name of the manufacturer of PV Module
 - b. Name of the manufacturer of Solar cells
 - c. Month and year of the manufacture (separately for solar cells and module)
 - d. Country of origin (separately for solar cell and module)
 - e. I-V curve for the module
 - f. Peak Wattage, I_m , V_m and FF for the module
 - g. Unique Serial No. and Model No. of the module
 - h. Date and year of obtaining IEC PV module qualification certificate
 - i. Name of the test lab issuing IEC certificate
 - j. Other relevant information on traceability of solar cells and module as per ISO 9000 series
8. The PV modules must be tested and approved by one of the MNRE authorized test centres for IEC/ IS certification. Test certificates can be from any of the NABL/ BIS accredited Testing / Calibration Laboratories. Qualification test certificates as per

IEC standard, issued by the Solar Energy Centre for small capacity modules up to 37 W_p capacity will also be valid.

9. The minimum power output of each of the module(s) under STC should be a minimum of 300 W_p
10. PV modules used in solar power plants/ systems 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.
11. The terminal box on the module should have a provision for opening for replacing the cable, if required.

Mechanical Components – Array Support Structure

1. The modules are to be installed in a single plane over raised structures made of galvanised iron angles, channels, pipes etc of proper size and strength with suitable height as per site condition. The bidders are required to make site survey and design accordingly.
2. On the raised structure, suitable number of PV panel structures shall be provided. Structures shall be of flat-plate design either I or L sections.
3. Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts. Galvanizing should meet ASTM A-123 hot dipped galvanizing or equivalent, which provides at least spraying thickness of 70 microns on steel as per IS-5905, if steel frame is used. Aluminium frame structures with adequate strength and in accordance with relevant BIS standards can also be used.
4. Structures shall be supplied complete with all members to be compatible for allowing easy installation at the site.
5. The structures shall be designed to allow easy replacement of any module.
6. Each structure shall have a provision to adjust its angle of inclination to the horizontal as per the site conditions. Solar module should be inclined towards south direction and installed at an angle of 10-15° from the horizontal.
7. Each panel frame structure shall be so fabricated as to be fixed on the raised structures. The structure should be capable of withstanding a wind load of 200 km/hr after grouting & installation. The lower end of the solar array must be above the rooftop. Grouting material for SPV structures shall be as per M15 (1:2:4) concrete specification.
8. The structures shall be designed for simple mechanical and electrical installation.
9. The supplier shall agree to provide installation details of the PV modules and the support structures with appropriate diagrams and drawings. Such details shall include, but not limited to, the following, to the beneficiary;
 - a. Determination of true south at the site
 - b. Array tilt angle to the horizontal, with permitted tolerance
 - c. Details with drawings for fixing the modules
 - d. Details with drawings for fixing the junction/ terminal boxes
 - e. Interconnection details inside the junction/ terminal boxes

- f. Structure installation details and drawings
- g. Electrical grounding (earthing as per BIS specifications)
- h. Inter-panel/ Inter-row distances with allowed tolerances; and
- i. Safety precautions to be taken

10. The array structure shall support SPV modules at a given orientation and absorb and transfer the mechanical loads to the rooftop column properly. All nuts and bolts shall be of very good quality stainless steel.

BATTERY BANK

Provision for a small Battery bank with an inverter of 5 KVA comprising of batteries conforming to IEC 61427 and applicable BIS specification for meeting the auxiliary requirement in the control room and campus shall be made.

Power Conditioning Unit

Power Conditioning Unit (PCU) shall comprise of charge controller and MPPT unit with power optimizer, inverter, voltage stabilizer, and distribution panel along with necessary displays, indicators and alarms suitable for 1000 KWp module array capacity.

Protections Required:

1. Short circuit (circuit breaker & electronic protection against sustained fault)
2. Over-load protection
3. Under voltage & Over-voltage
4. Auto/ Manual re-connect provision
5. Reverse polarity protection both for PV array.

Cooling:

Air cooled

Other Features:

1. Peak Efficiency: More than 93%
2. Efficiency at 50% of Load: 90%
3. Efficiency at 10% of Load: More than 85%
4. Load detection Threshold: Less than 3%
5. Surge Protection: 150% of the rated capacity for a period of 10 seconds
6. Acoustic Noise Level \leq 50 dB

Indicators / Displays / Alarms

1. Digital Display(s) of input DC SPV voltage & current, along with Energy Meter at the inverter output before the manual change-over switch
2. Separate LED indication of SPV charging
3. Digital Display(s) AC output voltage, frequency, power and current
4. Overload Alarm / cutoff
5. System Cutoff Indicator

6. System Reset Button

Electrical safety, earthing and protection

1. Internal Faults: In-built protection for internal faults including excess temperature, commutation failure, overload and cooling fan failure (if fitted) is obligatory.
2. Galvanic Isolation: Galvanic Isolation is required to avoid any DC component being injected into the grid and the potential for AC components appearing at the array.
3. Over Voltage Protection: Over Voltage Protection against atmospheric lightning discharge to the PV array is required. Protection is to be provided against voltage fluctuations in the load circuit itself and internal faults in the power conditioner, operational errors and switching transients.
4. Cabling practice: Cable connections must be made using PVC insulated copper cables, as per BIS specifications. All cable connections must be made using suitable terminations for effective contact.
5. Fast acting semiconductor type current limiting fuses shall be provided in PCU, and ELCB and MCB should be provided at the panel board fed by the PCU to protect from the load short circuit and earth leakage contribution.
6. The inverter shall include an easily accessible emergency OFF button located at an appropriate position on the unit.
7. The inverter shall include ground lugs for equipment and PV array grounding.
8. All exposed surfaces of ferrous parts shall be thoroughly cleaned, primed and painted or otherwise suitably protected to survive nominal 30 years design life of the unit.
9. The PCU/ inverter enclosure shall be weatherproof and capable of surviving climatic changes and should keep the inverter intact under all conditions in the room where it will be housed. The inverter shall be located indoor and should be either wall/ pad mounted. Moisture condensation and entry of rodents and insects shall be prevented in the inverter enclosure. Components and circuit boards mounted inside the enclosures shall be clearly identified with appropriate permanent designations.
10. All doors, covers, panels and cable exists shall be gasketed or otherwise designated to limit the entry of dust and moisture.
11. All doors shall be equipped with locks. All openings shall be provided with grills or screens with openings no larger than 0.95 cm.
12. In the design and fabrication of the inverter the site temperature (max 50°C), incident sunlight and the effect of ambient temperature on component life shall be considered carefully.

Factory Testing

1. Operation of all controls, protective and instrumentation circuit shall be demonstrated by direct test if feasible or by simulation operation conditions for all parameters that cannot be directly tested.
2. Operation of start up, disconnect and shutdown controls shall also be tested and demonstrated. Stable operation of the inverter and response to control signals shall also be tested and demonstrated.
3. Factory testing shall include measurement of phase currents, efficiencies, harmonic content and power factor. All tests shall be performed at 25, 50, 75 and 100 percent of the rated nominal power.
4. A Factory Test Report (FTR) shall be supplied with the unit after all tests. The FTR shall include detailed description of all parameters tested qualified and warranted.
5. Factory testing of the Inverter/ Inverters shall be carried out and beneficiary/ ANERT representative may be allowed to witness it at the manufacturer's premises, if so required.

Operating Modes

The following operating modes are to be made available:

Standby mode: Where the control system continuously monitors the output of the solar generator until pre-set value is exceeded.

Operational or max. Power Point (MPP) tracking mode: The control system continuously adjust the voltage of the generator to optimize the power available. The power conditioner must automatically reenter standby mode when input power reduces below the standby mode threshold. Front Panel display should prove the status of the Inverter, including AC Voltage, Current, Power output & DC Current, Voltage and Power input, power factor and fault indication (if any)

DC Distribution Board

DC Distribution panel to receive the DC output from the array field with analog measurement panel for voltage, current from different miniature circuit breaker (MCBs) so as to check any failure in the array field. DC DPBs shall have sheet from enclosure of dust & vermin proof. The bus bars are to be made of copper of desired size. Suitable capacity MCBs control is provided for controlling the DC power output to the inverter along with necessary surge arrestors.

AC Distribution Panel Board

AC Distribution Panel Board (DPB) shall control the AC power from PCU and should have necessary surge arrestors.

Cables

12.91 PVC insulated copper cables (ISI marked) for:

1. All cables to be supplied should have proper current carrying capacity.
2. All cables shall be adequately supported.

3. Outside of terminal/ panels/ enclosures shall be protected by conduits.
4. Cables shall be provided with dry type compression glands wherever they enter junction boxes, panels, enclosures.
5. Cable Marketing: All cable/wires are to be marked with proper manner by good quality ferule or by other means so that the cable can be easily identified.
6. Selected cable should carry a current density of minimum 1.2A /Sq.mm.

Warranty

1. 5 years warranty for the entire system should be provided by the supplier as per the conditions of the contract.
2. The Warranty Card to be supplied with the system must contain the details of the system supplied.
3. PV modules used in solar power plants/ systems 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

Operation Manual

1. An Operation, Instruction and Maintenance Manual, in English should be provided with the system.
2. The following minimum details must be provided in the manual:
 - About Photovoltaic
 - About solar power plant – its components and expected performance.
 - About PV module
 - About battery
 - About electronics
 - About charging and significance of indicators
 - DO's and DON'T's
 - Clear instructions on regular maintenance and trouble shooting of solar power plant.
 - Name and address of the contact person in case of non-functionality of the solar power plant.

Bill of Material

1. The bidder should provide the bill of material mentioning the quantity of each of the item consisting in one system, along with the offer.

Information Submission form

1.	Name of the bidder as in registration certificate	(Copy of registration certificate to be enclosed)
2.	Address in full	
3.	Contact Details Mobile Land Phone Fax No. Email address	
4.	Name of the authorized signatory	(authorization letter to be enclosed)
5.	Designation of the authorized signatory	
6.	Turn over of the firm for last two years (Copy of audited accounts to be submitted)	
7.	Total capacity of similar systems installed (Furnish the details)	
Details of System Components		
8.	Solar Module	
	Make Model No. Wattage of each module (if bidder is not the manufacturer, Authorization letter from Manufacturer to be enclosed)	
9.	IEC/ IS Compliance certificate of all the above enclosed	Yes / No (Compliance certificate for each make and model to enclosed)
10.	Power Conditioning Unit	
	Make Model no. Rated capacity (if bidder is not the manufacturer, Authorization letter from Manufacturer to be enclosed)	

11.	IEC/ IS certification for each of the above Power conditioning units enclosed	Yes/No (Compliance certificate for each make and model to enclosed)
12.	IEC/IS compliance certificate for all the above Charge Controller options enclosed	Yes/No (Compliance certificate for each make and model to enclosed)
13.	Battery (Auxiliary Supply) Make Type (flooded/ VRLA/ Gel) Model no. Rated Capacity (if bidder is not the manufacturer, Authorization letter from Manufacturer to be enclosed)	
14.	IEC/ IS compliance for each of the above battery options enclosed	Yes/No (Compliance certificate for each make and model to enclosed)
15.	Declaration on warrantee condition (To be enclosed in given format)	Yes/No
17.	Bill of Materials (To be enclosed in given format)	Yes/No

I have read the technical requirements, warranty conditions and the details furnished above are true and correct to my knowledge and belief. All the details furnished are supported by documentary evidence.

Date

Signature of the authorized signatory
Name
Designation

(Office Seal)

Format for submitting details of installed systems

Sl. No.	Address in Full	Mobile/ Land Phone No.	Date of Installation	Capacity of the system installed

Date

Signature of the authorized signatory
Name
Designation

(Office Seal)

