

**Tender Documents
For**

**Design, Supply, Installation, Commissioning, and 5 years CMC for
7 kWp (total) SPV Power Plants at Hejaichak Hindu Chatravas, Dima Hasao(2kWp) and District
Autonomous Council, Diphu, K. Anglng (5kWp) in Assam**

***Under*
Hill Area State Plan, Govt. of Assam**

NAME OF FIRM :

Tender Notice No. AEDA/150/Pt/2006/28

dated :03-05-18

Closing Date : 25-05-18



Assam Energy Development Agency,
Bigyan Bhawan, G.S. Road
Guwahati – 781005
Tel: 0361-2450147 / 2450646/2464618
Fax: 0361-2464617
Email: assamrenewable@gmail.com

Short Tender Notice

Sealed tenders accompanied by an IPO of Rs.20.00/ or Court fee stamp of Rs. 8.25 are hereby invited from experienced and reputed solar PV system integrator/manufacturer for design, supply, installation & commissioning of aggregate 7 kWp SPV power plant at to Karbi Anglong Autonomous Council (5kWp) and Hejaichak Hindu Chatravas, Dima Hasao (2kWp). The system should be covered with CMC for 5 years. Detail may be downloaded from www.assamrenewable.org. The last date of receipt of tender is 25-05-18.

Director, AEDA
G.S. Road, Ghy-5
Phone:0361-2450147/2464618



অসম শক্তি উন্নয়ন অভিকৰণ
ASSAM ENERGY DEVELOPMENT AGENCY
(Under Science & Technology Department, Govt. of Assam)
Bigyan Bhawan, Near IDBI Building, G.S. Road, Guwahati -781005
0361-2450147, 2450646, Mobile No.9365693838
e-mail: assamrenewable@gmail.com, www.assamrenewable.org

TENDER NOTICE

NO:AEDA/150(Pt)/2006/28/1969

Dated 03.05.2018

Sealed tenders are invited along with non refundable IPO of Rs. 20.00 or Court Fee of Rs.8.25 in favour of Director, Assam Energy Development Agency, payable at Guwahati for Design, Supply, Installation & Commissioning of aggregate 7 kWp SPV power plant at Karbi Anglong Autonomous Council (5kWp) and Hejaichak Hindu Chatravas, Dima Hasao (2kWp) under **TWO BID SYSTEM** from experienced and reputed solar PV system integrator/manufacturer. The system should be covered with CMC for 5 years. Detail may be downloaded from www.assamrenewable.org. The last date of receipt of tender is 25-05-18.

Name of the Work	Estimated Cost (in Rs.)	Earnest Money Deposit (EMD) (Rs.)	Cost of Bid document (in Rs.)	Period of completion (from the date of issue of work order)
Design, Supply, Installation & Commissioning of aggregate 7 kWp SPV power plant at Karbi Anglong Autonomous Council (5kWp) and Hejaichak Hindu Chatravas, Dima Hasao (2kWp) in Assam	9,45,000.00	18,900.00	500.00	90 days


The cost of Tender Document & Earnest Money (EMD) shall be deposited in the form of Demand Draft issued from any Nationalized / Scheduled Bank, or its subsidiary banks in favour of Director, Assam Energy Development Agency payable at Guwahati and should be enclosed with Technical Bid. The detailed notice, eligibility criteria and tender document can be downloaded from www.assamrenewable.org.

Any further notice/information related to this tender shall be uploaded on online mode. Assam Energy Development Agency reserves the right to reject any or all bids without assigning any reason thereof.

Details of Tender Schedule of e-bid

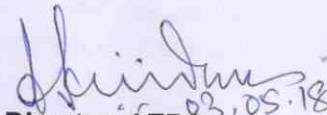
Sl. No.	Name of event	Starting Date	Starting Time	Ending Date	Ending Time
1	Tender Published	03-05-2018			
2	Tender Download	04-05-2018	10.00 hrs	25.05.2018	12.00 hrs
3	Tender Submission			25.05.2018	15.00 hrs
4	Bid opening	25.05.2018	15.10 hrs		

Note : In case of any Holiday on the scheduled day, same time on the next working day shall be considered unless notified.


(Arup Kr. Misra)
Director, AEDA

Copy to:

1. The Deputy Secretary to the Govt. of Assam
Science & Technology Dept.
Dispur, Guwahati-6 ... for your kind information.
2. Sri Tuliram Ranghang
Chief Executive Member
Karbi Anglong Autonomous Council
Diphu, Karbi Anglong
Pin-782460
3. Sri Ramanand Sharma
Organising Secretary
Uttar Purbancha Janajati Sewa Samity
Gopal Road, Panbazar
Guwahati-781001
4. For uploading at www.assamrenewable.org
5. Dy FAO, AEDA
6. AEDA/ASTEC notice board.


Director, AEDA
23.05.18

PART – I
GENERAL DETAILS

FROM :- (Full name and address of the tenderer)

M/s.....
.....
.....
.....

To,

The Director
Assam Energy Development Agency
Bigyan Bhawan, G.S. Road, Guwahati – 781005

Subject: - Offer in response to Tender Notice No.

Sir,

We hereby submit our offer in full compliance with terms & conditions of the attached tender. The tender is being submitted in two separate and sealed envelopes marked Part-I (Technical Bid) & Part-II (Financial Bid).

(Signature of Tenderer)

Seal

PARTICULARS OF TENDER

SI No	Particulars	Details
1	Tender Notice No.	
2	Particulars of the work	Design, Supply, Installation & commissioning 7 kWp (total) SPV power plant at Hejaichak Hindu Chatravas(2kWp), Dima Hasao and District Autonomous Council, Diphu, K. Angling(5kWp) in Assam
3	Quantity	1. Hejaichak Hindu Chatravas- 2kWp- 1no. 2. District autonomous Council, Diphu-5kWp-1no
4	Period of Contract	Till the completion of all proposed works.
5	IPO	Rs. 20.00 (Non Refundable) in favour of Director, AEDA, payable at Guwahati.
6	Cost of tender document	Rs. 500.00
7	Last date & time of submission	2:00 pm on 25-05-18
8	Amount of Earnest Money	Rs.18,900/-
9	Validity of offer for acceptance	Till Last date of Tender.
10	Date and Time of opening of tender	3:00 pm on 25-05-18
11	Place of opening of tender	AEDA Office, Bigyan Bhawan, G.S. Road, Guwahati – 5
12	Security Deposit	10% of the quoted price. The amount is to be deposited by the selected bidder only before issuing final work order.

Note:-

1. The tender document can be downloaded from <http://www.assamrenewable.org> and the cost of tender document need to be deposited/ inserted in the technical bid of the tender document.
2. All relevant required documents along with evidence are to be inserted in “Technical bid” and only quoted rates (as per Format enclosed) is to be inserted in the “Financial bid”.
3. Financial bid will be opened for those bidders who would duly qualify in the technical bid.

GENERAL PARTICULARS OF TENDERER

SI No	Particulars	Details
1	Name of Tenderer/Firm	
2	Postal Address	
3	IPO of Rs.20.00 or Court Fee of Rs.8.25	
4	E-mail address for communication	
5	Telephone, Fax No.	
6	Name, designation & contact number of the representative of the tenderer to whom all references shall be made.	
7	Nature of the firm (Individual/ Partnership/Consortium/ Pvt. Ltd /Public Ltd. Co. /Public Sector etc.) Attach attested copy of Registration & Partnership deed/Memorandum of Association	
8	Amount and particulars of the earnest money deposited.	
9	Annual Turnover for last three years (Attach proof)	
10	Name and address of the Indian/foreign collaboration if any.	
11	PAN No., GST, MNRE test certificates (if any) etc. (evidences are to be attached).	
12	Has the tenderer/firm ever been debarred by any institution for undertaking any work?	
13	Any other information attached by the tenderer (Details and Annexure / page no. where its enclosed)	
14	Does tenderer have any relative working in AEDA? If yes state the name and designation.	

Tenderers are requested to give their full particulars and legal and financial status.

(Signature of tenderer with Seal)

DECLARATION BY THE TENDERER

I
/We.....
.....

(Hereinafter referred to as Tenderer) 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 tenderer 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 tenderer 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, approach road and connectivity etc. and is well acquainted with actual and other prevailing working conditions, availability of required materials and labour etc. at site.
3. The tenderer is capable of executing and completing the work as required in the tender and is financially solvent and sound to execute the tendered work. The tenderer is sufficiently experienced and competent to perform the contract to the satisfaction of AEDA. The tenderer gives the assurance to execute the tendered work as per specifications, terms and conditions of the tender on award of work.
4. The tenderer has no collusion with other tenderers, any employee of AEDA or with any other person or firm in the preparation of the tender.
5. The tenderer has not been influenced by any statement or promises by AEDA or any of its employees but only by the tender document.
6. The tenderer is familiar with all general and special laws, acts, ordinances, rules and regulations of the Municipal, District, State and Central Government that may affect the work, its performance or personnel employed therein.
7. The tenderer has never been debarred from similar type of work by any Government undertaking /Department. (An undertaking in this regard shall be submitted)
8. The tenderer accepts that the earnest money / security deposit may be absolutely forfeited by AEDA if the selected bidder fails to sign the contract or to undertake the work within stipulated time.
9. This offer shall remain valid for acceptance for 12 (Twelve) months from the proposed date of opening of the Technical Bid.
10. All the information and the statements submitted with the tender are true and correct to the best of my knowledge and belief.

(Signature of Tenderer)
Seal

PART-2

INSTRUCTIONS TO TENDERERS

SECTION 1

INTRODUCTION

ELIGIBLE TENDERERS:

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

- (a) Is an indigenous system supplier of the Solar PV Systems or experienced contractor in the field of Solar PV Power Plant(evidence to be submitted).
- (b) The tenderer fulfills the terms and conditions of eligibility for supply of indigenous Solar PV Systems in accordance with the directions of Ministry of New and Renewable Energy, Government of India.
- (c) Has adequate financial stability and status to meet the financial obligations pursuant to the scope of work. (The firm must have annual turnover of minimum 10 Lacs during last three years.)
- (d) installation, testing, commissioning and maintenance in the field of Off-Grid Solar PV systems of more than 10 KW cumulative capacities in the last three years. The details must be submitted in the Performa given in Technical- Bid section of tender document.
- (e) Has Valid Test Certificate of the Solar PV module and other equipments as specified and required in the Technical- Bid of this tender document.
- (f) Fulfills all requirements as per provisions under MNRE, GOI.

The above stated requirements are compulsory to be fulfilled by the tenderer and AEDA may also ask for any additional information as may be deemed necessary in public interest.

SECTION 2

TENDER DOCUMENT

2.1 CONTENT OF TENDER DOCUMENT

2.1.1 The tender procedure and contract terms are prescribed in the tender document. In addition to the invitation of tender, the tender document includes the various other documents as given in the table of particulars of tender.

2.1.2 The tenderer is expected to examine all instructions, terms and conditions, specifications, forms and formats etc as mentioned/ enclosed 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 tenderer's risk and is likely to result in out-right rejection of the tender.

2.2 INFORMATION REQUIRED WITH THE PROPOSAL

2.2.1 The tender must clearly indicate the name of the manufacturer, the types and 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.

2.2.2 The above information may be provided by the tenderer in the form of separate sheets, specifications, catalogues etc.

2.3 CLEARIFICATION OF TENDER DOCUMENT

2.3.1 Any prospective tenderer requiring any clarification on the tender document regarding various provisions / requirements/ preparation/ submission of the tender, may contact AEDA in writing by letter or fax/ email within one week (7 days) from the date of publication/up-loading of tender at Website. Queries received later shall not be entertained.

2.3.2 Verbal clarifications and information shall not be entertained in any way.

All the notices related to this tender which are required to be publicized shall be uploaded only on <http://www.assamrenewable.org>

SECTION 3

PREPARATION OF TENDER

1.1 LANGUAGE OF TENDER AND MEASURE

The tender prepared by the tenderer along with all the related documents shall be in English. Unit measurements shall be metric in accordance with International System. All correspondence between the tenderer and AEDA shall also be in English.

1.2 EARNEST AND SECURITY MONEY

1.3 The tenderer shall furnish earnest money as mentioned in the 'Particulars of Tender' in the form of DD in favour of Director AEDA, payable at Guwahati.

1.3.1 The earnest money may be forfeited:-

- a) If a tenderer withdraws his tender during the specified period of validity of offer.
- b) If the successful tenderer fails to sign the contract agreement within stipulated period.

1.3.2 The 2% earnest money of the successful tenderer shall be released at the time of signing of the agreement with AEDA. At this time, the selected bidder shall have to deposit security money amounting to 10% of the contract value in the form of DD/ Bank guarantee from any nationalized bank in favour of "Director, Assam Energy Development Agency, payable at Guwahati". The bank guarantee should be valid for a period of 1 year. No interest shall be paid by AEDA on the amount of security money deposit.

1.3.3 The earnest money of all unsuccessful bidders shall be released soon after selection of selected bidder against submission of their written intimation regarding release of the EMD.

1.4 PERIOD OF VALIDITY OF TENDER

1.4.1 Validity of the offer should be 1 Year from the proposed date of opening of the Technical bid. Tenders without this validity will be rejected.

1.4.2 In exceptional circumstances, AEDA may solicit the consent of the tenderers to an extension of the period of validity of offer. The request and the response there of shall be made in writing.

1.5 FORMATS AND SIGNING OF TENDER

1.5.1 The tender must contain the name and places of business of the firm/person/persons participating in the tender and must be signed and sealed by the tenderer with his usual signature. The name and designation of all persons signing the tender document should be written below every the signature.

1.5.2 The original copy of the tender should be typed or written in indelible ink and must be signed with the legal representative.

1.5.3 The tender shall contain no interlink actions, erasers or overwriting except as necessary to correct the errors made by the tenderer in the preparation of tender. The person or persons signing the tender shall also sign at all such corrections.

1.6 PRICE AND CURRENCIES

The tenderers shall have to submit their rates in Indian Rupees and FOR site only including all latest applicable taxes & duties of Govt. of Assam as well as Govt. of India.

SECTION 4

SUBMISSION OF TENDER

4.1 SEALING AND MARKING OF TENDER

4.1.1 The tender must be completed in all technical and commercial respect and should contain requisite certificates, drawings, informative literature etc. as required in the tender document.

4.1.2 In Technical bid(sealed envelope) (Part-I), following documents are to be inserted:- i). Copy of money receipt for purchasing the tender document. In case it's downloaded from website, cost of the tender document is to be attached ii) IPO of Rs. 20.00 iii) Copy of Assam GST iv) Equipment Test certificate from competent authority v) Proof of local office including 3 nos.contact telephone no. local people. requisite earnest money, brochures, literature and other documents regarding technical specifications. **It should be superscribed with TENDER NO. AEDA/150/PT/2006/28 dtd.for 7 KW (total) SPV Power Plant & 'Earnest Money and Technical Bid '.**

4.1.3 The complete tender document in original (excluding financial bid) issued by AEDA or downloaded from the website should be submitted by the tenderer in the first envelope (Part- I) after furnishing all the required information on relevant pages. Each page of the tender document should be signed & stamped. Tenders with any type of change or modification in any of the terms/ conditions of this document shall be rejected. If necessary, additional papers may be attached by the tenderer to furnish/ submit the required information.

4.1.4 Second sealed envelope (Part-II) should contain financial bid only. **It should be superscribed with TENDER NO. AEDA/150/PT/2006/28 dtd.for 7 KW (total) SPV Power Plant and "Financial bid"**. The tenderer should submit his duly signed and stamped financial bid on the financial bid format attached with this tender document, after writing the price only.

4.1.5 Any term/condition proposed by the tenderer in his technical bid which is not in accordance with the terms and conditions of the tender document or any financial conditions, payment terms, rebates etc. mentioned in financial bid shall be considered as a conditional tender and will make the tender invalid.

4.1.6 Both the above sealed envelopes i.e. closely marked as Part-I (Technical Bid) and Part-II (Financial Bid) will be sealed in another one envelope, subscribed with **TENDER NO. AEDA/150/PT/2006/28 dtd. and Name of Work** (design, supply, installation, commissioning including internal wiring of 7 kWp SPV power plant to be installed at Karbi Anglong Autonomous Council (5kWp) and Hejaichak Hindu Chatravas, Dima Hasao (2kWp). The system should be covered under CMC for 5 years including warrantee for 2 years).This envelope shall be addressed to the Director, Assam Energy Development Agency, Bigyan Bhawan, G.S. Road, Guwahati – 781005.

4.2 DEADLINE FOR SUBMISSION OF TENDER

4.2.1 Tender must be received by AEDA till the date & time of submission as specified in tender document.

4.2.2 Any tender received after the specified date & time of submission will be rejected and returned unopened to the tenderer.

SECTION 5

TENDER OPENING AND EVALUATION

5.1 OPENING OF TENDER

The procedure of opening of the tender shall be as under:

5.1.1 First envelop (Part-I) bearing TENDER NO. and super scribed 'Earnest Money and Technical Bid' shall be opened by AEDA's representatives at the time and date mentioned in the 'Particulars of Tender', in the presence of tenderers who choose to be present. The financial and technical suitability of offers will be examined by AEDA in detail. If required, clarifications regarding the suitability of the offers will be obtained.

5.1.2 Second envelope (Part-II) bearing TENDER NO. and super scribed "Financial bid" s shall be opened those tenderers whowoud duly qualify in technical bid..

5.2 CLARIFICATIONS REGARDING THE SUBMITTED TENDERS

5.2.1 During the process of evaluation of the tender, AEDA may at its discretion ask the tenderer for a clarification of their tender. The request for clarification and the response shall be in writing.

5.2.2 Any query regarding any clarification required by AEDA on the information submitted by the tenderer, must be replied by the tenderer within the following time schedule.

- Email/ fax query should be replied by Email/ fax within 3 days.
- Query by letter must be replied by letter within 7 days of receipt of the letter

SECTION 6

AWARD OF CONTRACT

6.1 EVALUATION CRITERION

The whole work shall be on **Turnkey basis**. The tender shall be finalized on the basis of total cost of Solar Power Plant system including installation & commissioning and CMC as offered by the tenderer in his Financial Bid.

6.2 NOTIFICATION OF AWARD

Prior to the expiry of validity period of offer, AEDA will notify the successful tenderer by registered Letter/Email/ Fax that his tender has been accepted.

6.3 AWARD OF WORK CONTRACT

6.3.1 Before placement of supply orders, an agreement shall be signed between AEDA and the successful tenderer. Complete work shall ordinarily be awarded to the lowest tenderer only. The denial of the lowest bidder to undertake the whole work shall be treated as breach of contract and AEDA may forfeit EMD/ Security amount submitted by him.

6.4 RIGHT TO VARY QUANTITIES

The authority reserves the right of awarding the work in a phase manner. AEDA may increase or decrease the quantity mentioned in the tender notice at the time of award of contract.

6.5 RIGHT TO ACCEPT/REJECT ANY OR ALL TENDERS.

AEDA reserves all the right to reject any or all the tenders, accept any tender in total or in part.

6.6 EXPENSES OF AGREEMENT

The respective suppliers shall pay all the expenses of stamp duties and other requirements for signing the agreement with AEDA.

6.7 COMPLETION PERIOD

The completion period of the entire work shall be 3(three) months after issue of final work order. The work shall have to be completed within time and shall be binding on the contractor. In case of any urgency, the contractor may be asked to complete the work even earlier and contractor will be bound to fulfill the requirements.

PART-3 **GENERAL CONDITIONS OF CONTRACT**

1. DEFINITIONS

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

- 1.1 'AEDA' shall mean The Director or his representative of 'Assam Energy Development Agency, with its Head office at Bigyan Bhawan, ABC, G.S. Road, Guwahati – 5, Distt.-Kamrup (Metro). The 'Contractor' shall mean the Firm/ Person (whose tender has been accepted by AEDA) and shall include his legal representatives, successor in interest and assignees.
- 1.2 The contract shall be for Design, Supply, Installation, Commissioning, and year CMC for 7 kWp (total) SPV Power Plants at Hejaichak Hindu Chatravas, Dima Hasao(2kWp) and District Autonomous Council, Diphu, K. Angling(5kWp) in Assam and shall be valid till the completion of all related works. However the validity of rates may further be extended to a specified period of time and/or to other locations in Assam on the mutual consent of both the parties.
- 1.3 The Contractor shall be deemed to have carefully examined all papers, drawing etc. attach to the contract deed. If he shall have any doubt as the meaning of any portion or any condition (s) / specifications etc.

2. COMPLETION PERIOD

2.1 The completion period of the entire work shall be three (03) months after issue of final work order. The work shall have to be completed within time and shall be binding on the contractor. In case of any urgency, the contractor may be asked to complete the work even earlier and contractor will be bound to fulfill the requirements.

2.2 In case the contractor fails to execute the said work or related obligations within stipulated time, AEDA 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 any notice to the contractor. Any additional cost incurred by AEDA during such execution of the work shall be recovered from the contractor.

2.3 If the cost of executing the work as aforesaid shall exceed the balance payments due to the contractor and the contractor fails to make good the 'additional cost', AEDA may recover it from the contractor's pending claims against any work in AEDA or in any other lawful manner. All risks & responsibilities related to the execution of the said work and fulfillment of related obligations directly or indirectly connected with the performance of the contract shall be the sole responsibility of contractor.

2.4 The calculation of aforesaid 'additional cost' will be finalized by the AEDA 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 AEDA.

3. LIQUIDATED DAMAGES

If the contractor fails to perform the work within the time periods specified in the work orders or within the extended time period if any, AEDA 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, AEDA may consider termination of the contract.

4. PERFORMANCE SECURITY

The amount of the performance security as mentioned in the 'Payment Terms' shall be forfeited in case of violate of any term or condition by the contractor. If required, the other balance payments may also be forfeited, depending on the liabilities on the part of the contractor.

5. FORCE MAJEURE

5.1 Notwithstanding the provisions of clauses contained in this deed; the contractor shall not be liable for forfeiture of its performance security, liquidated damages, termination for default, if he is unable to fulfill his obligation under this deed due to force majeure circumstances.

5.2 For purpose of this clause, "Force majeure" means an event beyond the control of the contractor and not involving the contractor's fault or negligence and not foreseeable, either in its sovereign or contractual capacity. Such events may include but are not restricted to Acts of God, wars or revolutions, fires, floods, epidemics, quarantine restrictions and fright embargoes etc. Whether a "Force majeure" situation exists or not, shall be decided by the Director, AEDA & his decision shall be final and binding on the contractor and all other concerned.

5.3 If a force majeure situation arises, the contractor shall notify AEDA in writing promptly (at the most within 10 days from the date such situation arises). After examining the cases AEDA shall decide and grant suitable addition time for the completion of the work.

5.4 For other justified cases also, not covered under force majeure conditions, AEDA may consider the request of contractor and additional time for completion of work may be granted.

6. QUALITY, WARRANTEE/ GUARANTEE AND ANNUAL MAINTENANCE

6.1 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 manufacture 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.

6.2 After installation of the Solar PV Power Plant at site, the contractor shall ensure satisfactory performance of the equipments for a period of time as specified in the scope of work.

6.3 The contractor shall rectify defects developed in the Systems within Warrantee/ CMC period promptly. In case the contractor does not rectify the defects within 3 days of the receipt of complaint, AEDA may restore the System in working condition on contractor's expenses (from CMC charge).

7. STANDARDS

The goods supplied and works executed under this contract shall confirm to the standards mentioned in the technical specification and where no applicable standard is mentioned, the latest version of Indian Standard Institution or Bureau of Indian Specification shall be applicable.

8. 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.

10. PACKING FORWARDING

10.1 Contractors, wherever applicable shall properly pack and crate all materials in such a manner as to protect them from deterioration and damage during transportation. The contractor shall be responsible for all damage due to improper packing.

10.2 The contractor shall inform the Director, AEDA and Project site officer regarding the probable date of each shipment of materials from his works.

11. TRANSPORTATION

The contractor is required to deliver the goods at various locations as defined in the scope of work.

12. DEMURRAGE WHARFAGE, ETC

All demurrage, wharf age and other expenses incurred due to delayed clearance of the material or any other reason shall be on the account of the contractor.

13. INSURANCE

The power plant installed under the contract shall be fully insured against loss or theft for the period of 5 years.

14. LIABILITY FOR ACCIDENTS AND DAMAGES

During the Warrantee 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 installation on the systems.

15. DUTIES AND TAXES

The rates/ prices mentioned in the price-schedule include all latest applicable taxes, duties of Govt. of Assam as well as Govt. of India and applicable taxes will be deducted at source against which necessary tax deductions certificates will be issued as and when required. No additional payments shall be made by AEDA on this account.

17. RIGHT TO VARY QUANTITIES

AEDA reserves all the rights to increase or decrease the quantity of goods mentioned in the contract, at the time of placement of orders without any change in price or other terms and conditions.

18. LOCAL CONDITIONS

18.1 It will be imperative on contractor to have full information of all local conditions and factors which may have any effect on the execution of the works. The contractor shall be deemed to have collected all the relevant information regarding the proposed place of works/ site, its local environment, approach road and connectivity etc. and be well acquainted with actual working and other prevailing conditions.

18.2 The contractor is advised to pre-visit the site before quoting for as well as starting the work. AEDA shall not entertain any request of contractor for clarifications related to such local conditions and shall bear no responsibility in this regard.

19. TOOLS & TACKLES

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

20. TERMINATION FOR DEFAULT

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

20.1 If the contractor fails to deliver the Services within the allocated time period(s).

20.2 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.

21. TERMINATION FOR INSOLVENCY

AEDA may at any time terminate the contract by giving written notice to the contractor without compensation to the contractor if he becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to AEDA.

22. TERMINATION FOR CONVENIENCE

AEDA may vide a written notice sent to the supplier; terminate the contract, in whole or in part at any time for its convenience. The notice of termination shall specify that termination is for the purchaser's convenience in the interest of AEDA.

23. COMPLETION OF WORK

On completion of the work, the contractor shall submit 5 sets of "As Executed Report" to AEDA which will include photographs, drawings and as executed reports of various systems containing details of installation from the point of view of future maintenance of the installed systems. This report must also contain all Technical Details, Detailed Circuit Diagram of the Electronic/ Electrical components of all the system. The report shall include satisfactory performance report from appropriate authority for each site along with photograph of representative of the authority and the party.

24. OTHERS CONDITIONS

24.1 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 AEDA in writing.

24.2 AEDA may at any time either stop the work all together or reduce or cut it down by sending notice in writing to the contractor. If the work is stopped all together, the contractor will only be paid for work done and expenses distinctly incurred by him as on preparation or the execution of the work up to the date on which such notice is received by him. The decision of AEDA regarding assessment of such expenses shall be final and binding on the contractor. If the work is cut down, the contractor will not be paid any compensation what to ever for the loss of profit which he might have made if he had been allowed to complete all the work awarded to him.

24.4 Work carried out without AEDA's approval shall not be accepted and AEDA shall have rights to get it removed and to recover the cost so incurred from the contractor.

24.5 The contractor shall not display the photographs of the work and not take advantage through publicity of the work without written permission of AEDA.

24.6 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.

24.7 AEDA will not be bound by any Power of Attorney granted/ issued by the contractor or by any change in the composition of the firm made during or subsequent to the execution of the contract. However recognition to such Power of Attorney and change (if any) may be given by AEDA after obtaining proper legal advice, the cost of which will be chargeable to the contractor concerned.

25. STATUTORY ACTS

25.1 All legal formalities/clearances are to be obtained by the contractor regarding the execution of the said work.

25.2 In respect of all labour directly or indirectly employed on the work by the contractor, the contractor shall comply with all the provisions of hiring the contract labour and rules of State/ Central Government or any other authority framed from time to time. The rules and other statutory obligations in this regard will be deemed to be the part of this contract.

25.3 The contractor shall comply with all the Acts & rules and regulations, laws and bylaws framed by State/ Central Government/ Organization in whose premises the work has to be done. AEDA shall have no liabilities in this regard.

26. APPLICABLE LAW

The contract shall only be interpreted under Indian laws. The station of AEDA Headquarter Guwahati shall have exclusive jurisdiction in all matters arising under this contract.

27. RESOLUTION OF DISPUTES / ARBITRATION

Any disputes arises regarding this tender will be settled under area of jurisdiction of head office of AEDA.

28. NOTICES

28.1 Any notice to be given by one party to the other, pursuant to the contract shall be sent in writing. A notice shall be effective when delivered or from the effective date mentioned in the notice, whichever is later.

28.2 Notices, statements and other communications sent by AEDA to the contractor at his specified addresses through registered post/ email/ fax shall be deemed to be delivered to the contractor.

29. APPLICATION

These general conditions shall apply to the extent that provisions in other parts of the contract do not supersede them.

30. PAYMENT TERMS

30.1 70% of the contract value (i,e supply & installation part only) shall be paid after successful supply, erection, commissioning & Testing of Solar PV Power Plant Systems at site.

30.2 Balance 20% (i,e, supply & installation part only) amount shall be paid after 6 months of satisfactory working of the systems .

30.3 Balance 10% of the contract value (i,e, CMC part) only shall be paid in 5 equal yearly installments against satisfactory performance and maintenance of the systems. A separate agreement is to be executed for 5 years against the CMC parts.

PART-4
GENERAL TECHNICAL SPECIFICATIONS

Size of PV Plant required /Minimum size of Solar PV Array

a. Karbi Anglong Autonomous Council, Assam:

Plant Capacity at each location	Location	Minimum Size of the PV array at each location.
5 kW Capacity	Karbi Anglong	PV array should not be less than 5000 Wp

a. Hejaichak Hindu Chatravas:

Plant Capacity at each location	Location	Minimum Size of the PV array at each location.
2 kW Capacity	Hejaichak, Dima Hasao	PV array should not be less than 2000 Wp

1. PV MODULES:

- a) The PV modules must conform to the latest edition of any of the following / equivalent BIS Standards for PV module design qualification and type approval:
- Crystalline Silicon Terrestrial PV Modules IEC 61215 / IS14286
- b) In addition, the modules must conform to IEC 61730 Part 1- requirements for construction & Part 2 - requirements for testing, for safety qualification.
- c) IV Curve both soft copy & hard copy must be provided (Image / PDF).

2. BATTERY BANK:

- (i) Batteries should be Tubular Gel VRLA type of 2Volts cell.
- (ii) 80 % of the rated capacity of the battery should be between fully charged & load cut off conditions.
- (iii) The battery will have a minimum rating as per following.

SL. No	Plant Capacity	Location / Site	Minimum Size of the Battery Bank
1	5 kW Capacity	Karbi Anglong Autonomous Council	Battery capacity -36000 vAh
2	2 kW Capacity	Hejaichak Hindu Chatrabas, Dima Hasao	Battery capacity- 14400 vAh

- (iv) Batteries must conform to the latest edition of IEC/ equivalent BIS Standards as specified below:

Description	Standard Number
General Requirements & Methods of Test	IEC 61427
Flooded Electrolyte Tubular plate Low maintenance	IS 1651/IS 13369
Valve Regulated Tubular Lead Acid (VRLA)	IS 15549

3. BALANCE OF SYSTEM (BoS) ITEMS/ COMPONENTS:

Details of Power Conditioning Units:

a. General:

Plant Capacity	Nominal Output rating	Nominal DC Input voltage	AC Out put voltage	Surge for 30 sec	Integrated Solar regulator
2 kW Capacity	2.5 KVA	24/48 Volt	230 V – 50 Hz	150 %	2 kW
5 kW Capacity	5.5 KVA	60/72/96 Volt	230 V – 50 Hz	150 %	5 kW

The BoS items / components of the Solar PV Power Plants/ systems must conform to the latest edition of IEC/ equivalent BIS Standards as specified below:

BoS item/component	Applicable IEC/equivalent BIS Standard	
	Standard Description	Standard Number
Power Conditioners/ Inverters*	Efficiency Measurements Environmental Testing	IEC 61683 IEC 60068 2 (6,21,27,30,75,78)
Charge controller/ MPPT units*	Design Qualification Environmental Testing	IEC 62093 IEC 60068 2 (6,21,27,30,75,78)
Cables	General Test and Measuring Methods PVC insulated cables for working Voltages up to and including 1100 V-Do-, UV resistant for outdoor installation	IEC 60189 IS 694/ IS 1554 IS/IEC 69947
Switches/Circuit Breakers / Connectors	General Requirements Connectors- safety	IS/IEC 60947 part I,II,III EN 50521
Junction Boxes/ Enclosures	General Requirements	IP 65 IP 21 IEC 62208
SPV System Design	PV Stand-alone System design verification	IEC 62124
Installation Practices	Elect. installation of building requirements for SPV power supply systems	IEC 60364-7-712

**** BoS Must additionally conform to the relevant national/international Electrical Safety Standards.**

4. MAIN FEATURES & OPERATING MODE

PCU should give preference to the solar power as the first input to load and extra energy produced by solar is used to charge the battery bank. The second preference is given to the grid. In the absence of both solar and grid the power from the battery is fed to the load.

The PCU always gives preference to the solar power and will use Grid power only when the solar power / battery charger is insufficient to meet the load requirement.

5. MODULE MOUNTING STRUCTURE

- Modules shall be mounted on a non-corrosive support structure towards due south and at a suitable inclination to maximize annual energy output.
- Support structures shall be manufactured with steel angles & channels; spray galvanized to IS 1477 Part -1 with thickness of 70 microns as per IS 5905. Structure shall be designed for mounting of offered Solar Modules with angle adjustment facility from 5° to 45° with an interval of 5°. All fasteners shall be of Stainless steel - SS 304.
- The foundation for Module Mounting structures shall be 1:2:4 PCC Construction. There shall be minimum necessary clearance between ground level and bottom edge of SPV modules.

6. ORIENTATION AND TILT OF PV MODULE

Modules alignment should be due south and tilt angle shall be 26 - 30 degrees with horizontal.

7. DC DISTRIBUTION BOARD (DCDB)

A DCDB shall be provided in between PCU and Solar Array. It shall have MCCB of Suitable rating for connection and disconnection of array section. It shall have meters for measuring Array voltage and Array current.

8. AC DISTRIBUTION LINE

The generated electricity from these Power Plants will be utilized for illumination of Streets/Indoor Lighting, fans, computers, Internet Modem, Printers, within allowable practice limit. Necessary electric cable/connection shall be supplied/made by the bidder for illumination of existing street lights/indoor lights.

9. OPERATION MANUAL

An Operation, Instruction and Maintenance Manual, in English and the local language, should be provided with the Solar PV Power Plant and detail of Wiring and Connection Diagrams will also be provided with the manual.

10. WARRANTY/ GUARANTEE

(i) The complete Solar PV Power Plant must be warranted against any manufacturing/ design/ installation defects for a minimum period of 2 years.

(ii) PV modules used in Solar PV Power Plant must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 12 years and 80% at the end of 25 years.

11. TEST REPORTS

The test certificate of various components of the proposed SPV system should be in accordance with guidelines of MNRE for off grid Solar PV systems under Jawaharlal Nehru National Solar Mission (JNNSM) and related Addendums/ Minutes of meeting published on MNRE website (Enclosed with this tender document). Test certificates from MNRE approved test centers shall also be considered valid.

(iii) A strip containing the following details should be laminated inside the module so as to be clearly visible from the front side:

- a) Name of the Manufacturer or distinctive Logo
- b) Model or Type No.
- c) Serial No.
- d) Year of make.

PART-5
FINANCIAL BID
Tender No.

Name of work: Design, Supply, Installation & Commissioning of Solar PV Power Plant of 7 kWp aggregate Capacity at (a) Karbi Anglong Autonomous Council (5kwp) and (b) Hejaichak Hindu Chatrabas (2kWp), Dima Hasao including 5 years CMC and 2 years warrantee.

(Amounts in INR)

SL. No	System Details	Location / Site	Quoted Amount (In Figure)	Amount (In words)
A.	Solar PV Power Plant of 5 Kilowatt capacity.	Karbi Anglong Autonomous Council		
1	Design & Supply			
2	Installation & Commissioning			
3	5 years CMC including 2 Years warrantee			
4	Cabling and outdoor Fixtures including 4 outdoor light(15w LED) with individual pole of height 5m above the ground.			
		Total A		
B.	Solar PV Power Plant of 2 Kilowatt capacity.	Hejaichak Hindu Chatrabas		
1	Design, Supply			
2	Installation & Commissioning			
3	5 years CMC including 2 Years warrantee			
4	Internal Wiring and Fixtures for entire load (9w X 30 nos. LED + 3 nos. 3 pin socket) including 4 outdoor light with individual pole of height 5m above the ground			
5	External Charging point for 2 nos. of 12V/40Ah battery			
		Total B		
		Grand Total(A+B)		

Signature & seal

N.B. The above rates are inclusive of all applicable taxes, duties, transportation, insurance etc.

FORMAT FOR BANK GUARANTEE FOR - SECURITY MONEY DEPOSIT

This deed of Guarantee made on day of Month & Year by Name & Address of the bank (hereinafter called the 'GUARANTOR') on the one part, on behalf of M/s Name & address of the Firm (hereinafter called the 'FIRM')) in favour of Director, Assam Energy Development Agency, Bigyan Bhawan, GS Road, Guwahati - 5 on the following terms and conditions.

Whereas the FIRM is entering into a agreement with AEDA for the '**Name of work**'..... and this guarantee is being made for the purpose of submission of Security money required to be deposited at the time of signing of the agreement between AEDA and FIRM.

Know all people by these presents that the GUARANTOR, hereby undertake to indemnify and keep AEDA indemnified up to the extent of Rs.....during the validity of this bank guarantee and authorize AEDA to recover the same directly from the GUARANTOR. This bank guarantee herein contained shall remain in full force and effect till the expiry of its validity or till any extended period (if extended by the bank on receiving instructions from FIRM.). The liability under the guarantee shall be binding on the GUARANTOR or its successors.

Whereas the GUARANTOR further agrees that their liability under this guarantee shall not be affected by any reason of any change in the offer or its terms and conditions between the FIRM and AEDA with or without the consent or knowledge of the GUARANTOR.

Whereas the GUARANTOR further agrees to pay guaranteed amount hereby under or part thereof, on receipt of first written demand whenever placed by AEDA during the currency period of this guarantee. The GUARANTOR shall pay AEDA immediately without any question, demure, reservation or correspondence.

Whereas the GUARANTOR hereby agrees not to revoke this guarantee bond during its currency period except with the previous consent of AEDA in writing.

Notwithstanding anything contained herein –

- Our liability under this bank guarantee shall not exceed Rs.
- This Bank guarantee shall be valid up to
- We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only against the written claim or demand on or before

Sealed with the common seal of the bank on thisday of Month and Year.

Witness

1.....

(Signature and seal of the bank)

2.....