



**MIZORAM RURAL BANK  
HEAD OFFICE , MINECO, KHATLA  
AIZAWL, MIZORAM**

e-mail : [fa@mizobank.com](mailto:fa@mizobank.com)

Ref.no: CM(FA)/2022-23/122

Dated 10.05.2022

**Tender for Supply, installation,  
testing, commissioning and  
maintenance of**

**5 KVA UPS & 10 KVA UPS**

**ENVELOPE – 1**

**TENDER DOCUMENT - TECHNICAL CUM COMMERCIAL  
BID (Submit technical & commercial bid in separate  
envelope) All pages should be submitted duly filled, signed  
& stamped**

**MIZORAM RURAL BANK  
INDEX OF TENDER DOCUMENT**

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## NOTICE INVITING TENDER

Mizoram Rural Bank invites sealed quotations for 5KVA and 10 KVA from authorized dealers for the works mentioned below:

**1. Name of the work** : Supply, installation, testing, commissioning and maintenance of 5 KVA & 10 KVA UPS with Digital Signal Processing controlled, IGBT Rectifier Technology based Standby Mode sharing online UPS systems with battery bank to provide 24 hrs battery backup and accessories for it's Mizoram Rural Bank, at BRANCHES MENTIONED ANNEXURE as fully described in the tender document under Technical Specification, Scope of Supply etc. and its related works.

**2. Concept of tender** : **The tender concept is "Two Envelope Concept"**

Envelope - 1 - Technical cum commercial bid

Envelope - 2 - Price bid

Both the bids should be submitted on the same date & time but in separate envelopes, sealed and super- scribed the details on the envelope

Submission Start Date	Dt. 10-05-2022	
Last date for Submission of Tender	Dt. 09-06-2022	3:00PM
Opening of Tender	Dt. 09-06-2022	3:30 PM

### Envelope -1

The Bidder should submit their Quotations in sealed envelope-1 with Superscription  
"QUOTATION FOR SUPPLY OF 5KVA & 10KVA UPS"  
TECHNICAL CUM COMMERCIAL BID

### Envelope-2

"QUOTATION FOR SUPPLY OF 5KVA & 10KVA UPS"  
PRICE BID

**The General Manager,  
Mizoram Rural Bank,Head Office  
MINECO, Khatla, Aizawl  
Mizoram 796001**

**GENERAL RULES AND INSTRUCTIONS FOR THE GUIDANCE OF TENDERER**

Sealed Tenders are invited from authorized dealer of UPS for supply, installation, testing, commissioning and maintenance of **UPS systems** as fully described in the tender document under Technical Specification, Scope of Supply etc.

1. Scope of work involves undertaking the design based upon the parameters furnished and manufacture, testing at shop, supply, Installation, testing at site and commissioning the specified UPS Systems of specified configuration along with battery bank and its allied works like battery inter connections, associated electrical work and co-ordination with electrical contractors as directed by the engineer-in-charge etc. , which are fully described in the technical specification. This also involves providing maintenance and management of the UPS system supplied so as to ensure uninterrupted power supply on 24X 7 basis.

2. Tender documents consisting of specifications, schedule of quantities of the various items of work to be done and the set of terms and conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents can be collected between the dates mentioned in the Notice Inviting Tender (NIT) between hours of 10:00 a.m. and 05.00 p.m. everyday except on Sundays and Public Holidays as specified in NIT, at the office of the Mizoram Rural Bank, Head Office.

3. The tender concept is "TWO ENVELOPE CONCEPT" and it has to be submitted as such. It should be always be placed in sealed cover, with the name of the project written on the envelope mentioning "Quotation for supply of 5KVA & 10KVA UPS Technical and Commercial Bid" and " Quotation for supply of 5KVA & 10KVA UPS Price Bid" as the case may be and submitted in two different sealed envelopes simultaneously on the prescribed date and time as detailed below:

The sealed tenders will be received by: The Manager / Chief Manager, Fixed Assets & Premises Department, Mizoram Rural Bank, Head Office ,MINECO, Khatla ,Aizawl , Mizoram -796001.

**Both the envelopes will be received on or before : 09.06.2022 up to 3.00 PM**

**The Technical & Commercial bid /Price bid will be opened in the said office on 09.06.2022 at 3.30 PM**

The TENDERER is requested to participate during the opening of the tender.

3.1. The two envelope are classified as,

- (1). The Technical & Commercial Bid and
- (2). The Price Bid.

3.2. The first envelope super scribed as "Quotation for supply of 5KVA & 10KVA UPS Technical and Commercial Bid" should be submitted in a sealed envelope containing all the following details:

i). All the schedules of the tender document, tender drawings if any & technical & commercial details of the proposed system equipment with its components & all other attachments. This includes establishing the techno- economical advantages of the system offered (terms of AMC are explained elsewhere in the document).

4. The second envelope super scribed as " Quotation for supply of 5KVA & 10KVA UPS Price Bid" should be sealed and submitted on the same given date and time simultaneously along with technical & commercial bid. Non submission of the same along with shall automatically render the entire tender being rejected. This envelope should contain duly filled in Bill of quantities (enclosed in the tender document) with values written in words and figures, and as detailed elsewhere in the tender documents.

5. Tender shall be on prescribed Form only which can be obtained from our office as detailed in Notice Inviting Tender.

6. The contractors should quote in figures as well as in words the rate, and amount tendered by them. The amount for each item should be worked out and the requisite totals given. The rates quoted shall be all inclusive rates for the item of work described, including materials, labour, tools & plant, carriage & transport, supervision, overheads & profits, mobilising and other charges whatsoever including any anticipated or un-anticipated difficulties etc. complete for proper execution of the work as per drawings and specifications and no claim whatsoever for any extra payment shall be maintainable.

7. The acceptance of a tender will rest with the Employer which does not bind itself to accept the lowest tender, and reserves to itself the authority to reject any or all of the tenders received without assigning any reason. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected. THE EMPLOYER RESERVES THE RIGHT TO ACCEPT THE TENDER IN FULL OR IN PART AND THE TENDERER SHALL HAVE NO CLAIM FOR REVISION OF RATES/OTHER CONDITIONS IF HIS TENDER IS ACCEPTED IN PART.

8. Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable for rejection.

9. All rates shall be quoted on the proper form of the tender alone. Quoted rates and units different from prescribed in the tender schedule will be liable for rejection.

10. Special care should be taken to write the rates in figures as well as in words and the amounts in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the symbol `₹.' should be written before the figure of rupees and words `P' after the decimal figures, e.g. ₹ 2.15 "P" and in case of words, the word `Rupees' should precede and the word `Paise' should be written at the end, unless the rate is in whole rupees and followed by the words `only' it should be invariably be up to two decimal places. While quoting the rate is in schedule of quantities, the word `only' should be written closely following the amount and it should not be written in the next line. However, if a discrepancy is found;

i). the rates which correspond with the amount worked out by the tenderer shall unless otherwise proved be taken as correct. (OR)

ii). if the amount of an item is not worked out by the tenderer or it does not correspond with the rates written either in figures or in words then the rate quoted by the tenderer in words shall be taken as correct. (OR)

iii). where the rates quoted by the tenderer in figures and in words tally but the amount is not worked out correctly, the rates quoted by the tenderer will unless otherwise prove be taken as correct and not the amount.

11. In the case of any errors or omissions in the quoted rates, and if the tender is issued in duplicate, the rates quoted in the tender marked "Original" shall be taken as correct rates.

12. An item rate tender containing percentage below / above will be summarily rejected. However, where a tenderer voluntarily offers a rebate for payment within a stipulated period, this may be considered.

13. Sales tax, work contract tax, or any other tax, any royalties, duties, levies, cess, entry tax, Octroi, profession tax, Sales Tax, purchase tax, turnover tax, or any other tax on material or finished work in respect of this contract shall be payable by the tenderer and the Employer will not entertain any claim whatsoever in respect of the same, and nothing extra shall be paid/reimbursed for the same subsequently.

14. The contractor shall give a list of his relatives, if any, working with the Employer alongwith their designations and addresses.

15. No employee of the employer is allowed to work as a contractor for a period of two years of his/her retirement from the employer services, without the previous permission of the employer. This contract is liable to be canceled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of the employer as aforesaid before submission of the tender or engagement in the contractor's service.

16. The tender for the works shall remain open for acceptance for a period of **12 months** from the date of opening of tenders.

17. The tender for the work shall not be witnessed by a contractor or contractors who himself / themselves has / have tendered or who may and had/have tendered for the same work. Failure to observe this condition would render tenders of the contractors tendering as well as witnessing the tender liable to summary rejection.

18. It will be obligatory on the part of the tenderer to tender and sign the tendered documents for all the component parts and that, after the work is awarded, he / they will have to enter into an agreement for each component with the competent authority of the Employer.

19. Further the tenderer shall agree that until a formal agreement on stamp paper is prepared and signed, this tender shall constitute a binding contract between the tenderer and the Employer.

20. The tenderer, apart from being a competent contractor must associate himself with agencies of appropriate class who are eligible to tender for other related works connected directly or indirectly with the contract and employed by the employer.

21. The Employer does not bind itself to accept the lowest or any tender and reserves to itself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.

22. Tenderer are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the site and dimensions, the means of access to the site, and obtain all necessary information's as to risks, contingencies and other circumstances which may influence or affect their tender.

23. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and local conditions and other factors bearing on the execution of the work.

24. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Employer shall be communicated to the Employer.

25. **Method of Evaluation of tender:** All the competitive tenders will be received on the specified date and time. On the same day or on specified date & time in event of any compelling circumstances, the tenders will be opened in the presence of the available tenderer.

26. The tenderers are expected to attend the tender opening and their inability in participating will not in any way prevent the employer undertaking the opening of the bids.

27. Being a techno - economical project, besides the capital cost the AMC charges for 4 years (4 years + 2 years warranty) will also be evaluated. Therefore, the tenderers / contractors shall furnish the AMC charges in the price bid for 4 years and terms of AMC shall be furnished in the technical & commercial bid clearly furnishing the details regarding the scope of AMC, details of spares, consumables & equipments covered and also details of exclusions.

28. The Employer reserves the right to accept or reject any of the offer's without assigning any reason and no dispute or negotiation will be entertained in this regard. The Employer's decision will be final in the matter.

29. The notice inviting tender, general rules & instructions for the guidance of tenderers shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within **7 days** from the stipulated date of start of the work sign on a stamp paper the contract consisting of :-

(a) Standard form of Agreement on stamp paper.

(b) Notice inviting tender, all the documents including tender, drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto. General Conditions, Schedules leading to Technical Specification, Special Conditions, Technical Brochures in schedules submitted by the tenderer etc.,

(c) Price Bid / Schedule Bill of Quantities.

For & on behalf of the Employer

Signature of the authorised representative / Accepting Authority.

Signature of the Tenderer with Name, Constitution & Seal.

II) **TENDER - OFFER**

I/We have read and examined the Notice Inviting Tender. Schedules, Specifications Applicable, Drawings and Designs, General Rules and Instructions, General Conditions of Contract, Special conditions, Schedule (Bill) of quantities in Price Bid, and all other documents referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Employer within the time specified at the rates specified in the attached Price Bid viz., schedule of quantities and in accordance in all respects with the specifications, designs drawings and instructions in writing referred to in the General Rules and Instructions, General Conditions of Contract and in all respects in accordance with, such conditions so far as applicable.

I/We agree to keep the tender open for 12 months from the due date of submission thereof and not to make any modifications in its terms and conditions.

I/We agree that should I/We fail to deposit the full amount of initial security deposit and/or fail to commence the work specified in the above memorandum, an amount equal to the amount of the security deposit mentioned in the form of invitation of tender shall be absolutely forfeited to the Employer and the same may at the option of the Employer be recovered without prejudice to any other right or remedy available in law, out of the deposit in so far as the same may extend in terms of the said bond and in the event of deficiency out of any other money due to me/us under this contract or otherwise.

I/We hereby declare that I/We treat the tender documents, drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any persons other than a person to whom I/We am /are authorised to communicate the same or use the information in any manner prejudiced to the safety of the State / the Employer.

I/We fully understand that you are not bound to accept the lowest or any tender you may receive. Shri. \_\_\_\_\_, Partner / Proprietor / Authorised representative of the Company, is the person authorised to negotiate commercial, technical terms & conditions & sign on behalf of the firm any Agreement, Bills & receipts for this work.

I/We agree that until a formal agreement on stamp paper is prepared and signed, this tender with your written acceptance thereof shall constitute a binding contract between us.

Dated the: \_\_\_\_\_ day of \_\_\_\_\_

Witness, Name & address:

Full Postal Address including

Signature of Contractor

Pin Code NO. & Telephone NO.

1).

2).

(III) ACCEPTANCE

The above tender (as modified by us or negotiations as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the Employer for a sum of

Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_)

The letters referred to below shall also form part of this contract agreement:

a)

b)

c)

Dated this \_\_\_\_\_ day of \_\_\_\_\_

For & on behalf of the Employer

Signature : \_\_\_\_\_

Designation: \_\_\_\_\_

**FORM OF AGREEMENT**

This agreement made the \_\_\_\_\_ day of the month of \_\_\_\_\_ in the year \_\_\_\_\_ BETWEEN, Mizoram Rural Bank having its Head office, at Aizawl, Mizoram represented by its duly constituted attorney (hereinafter referred to as the Employer / Bank) on the ONE PART; and

\* Shri \_\_\_\_\_ S/D/o \_\_\_\_\_ resident of \_\_\_\_\_ the sole proprietor of M/s \_\_\_\_\_ having office at \_\_\_\_\_ the following address \_\_\_\_\_

\* M/s. \_\_\_\_\_ the partnership firm having an administrative/principal office at \_\_\_\_\_ represented by its Managing/duly authorised partner.

\* M/s. \_\_\_\_\_ company/body corporate incorporated under the provisions of the Companies Act 1956 having its registered office at the following address \_\_\_\_\_, duly represented at \_\_\_\_\_ duly represented by its constituted and authorised Managing Director, Shri \_\_\_\_\_ and (hereinafter called the Tenderer which term shall also be called the Supplier or the Contractor ) on the other part

WHEREAS THE Employer / Bank is desirous that certain works should be designed, supplied, installed, tested & commissioned as detailed in the notice inviting tender and their office mentioned and called for invitation to tenderers for the supply, installation and performance of such works has been accepted by the Employer on the terms and conditions as set out therein and interalia others.

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this agreement words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to.
2. The following documents not inconsistent with these presents shall be deemed to form and be read and construed as part of this agreement viz;
  - a) Notice inviting Tender
  - b) General rules and Instructions for the guidance of tenderers.
  - c) The Tender, Letter of Acceptance, Letters from & to the tenderer, if any, leading to and prior to acceptance letter.
  - d) General Conditions of contract and clauses of contract along with Annexure thereto.
  - e) Schedules I, II, & III consisting of Technical Specifications, Special Conditions, Questionnaire, Comprehensive AMC terms, tender drawings if any, etc.
  - f) Schedule of quantities including Prices and tendered amount known as Price - Bid.
  - g) The details submitted in technical bid, design, and such other commitments like Annual Maintenance Charges for the period mentioned shall be part of the agreement.

**[Note : \* Strike off whichever is not applicable ]**

3. In consideration of the payments to be made by the Employer to the tenderer, the tenderer hereby covenants and agrees with the Employer to complete the works in conformity in all respects and subject to all terms and conditions/rules as mentioned in the General Conditions as also in the aforesaid documents which shall form part of this agreement.

In witness whereof the parties hereto have hereunto set their respective hands and seals the day and year first above written.

Signed, sealed and delivered by the said tenderer, \_\_\_\_\_

\_\_\_\_\_ to the Employer \_\_\_\_\_ in the presence of:

Signature of Tenderer (with seal)

Signature of Authorised representative of the Employer / Accepting Authority.



## GENERAL CONDITIONS OF CONTRACT

Except where provided for in the description of the individual items in the schedule of quantities and in the specifications and conditions laid down hereinafter and in the Drawings, the work shall be carried out as per standard specifications and under the direction of the Employer.

### 1. DEFINITIONS / INTERPRETATIONS:-

i). The 'Contract' means the documents forming the tender and acceptance thereof and the agreement duly executed between the Employer and the Tenderer, together with the documents referred to therein including those conditions, the specifications, schedule of quantities, tender agreement, designs, drawings and instructions issued from time to time by the Engineer-in-Charge. All these documents taken together shall be deemed to form one contract and shall be complementary to one another.

ii). In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them :-

a) The 'Tenderer' or 'Supplier' or 'Contractor' or UPS vendor shall mean the individual Kartha, or Manager, firm or Company, whether incorporated or not, undertaking the works and shall include the legal heirs/representatives of such individual or the partners composing firm and their legal heirs and successors, or company's authorised and constituted attorneys/agents and permitted assignees of such firm or company.

b) The 'Employer' or 'Bank' means any officer of the Mizoram Rural Bank, who is specifically authorised to enter into contracts in respect of the above works.

c) The 'Engineer-in-Charge' means the Senior Manager / Engineer and/or Site Engineer who shall supervise and be in-charge of the work or any other authorised representative or person specifically deputed by the Employer and / or the Consultants wherever they are employed from time to time by the Employer.

d) 'Contract Price' shall mean the final accepted rates in the Price Bid hereto.

e) 'Date of Contract' means the 'Calendar date on which the Employer and Contractor have signed the Agreement on the Stamp Paper.

f) "Accepting Authority" shall mean The Chairman of the Mizoram Rural Bank (the Employer).

'Approval' wherever used in the specifications or schedule of Quantities shall mean, respectively, approved by or approval of the 'Accepting Authority' in writing.

g) 'Appellant Authority' shall mean The General Manager, of the Bank ( the Employer ). Who shall also be the authority to consider any extension of time or compensation as defined in clause hereunder.

h) 'Notice in writing' or 'written notice' shall mean a notice in writing typed or printed characters delivered to or sent by registered post to the last known address private or business address or registered office address, and shall be deemed to have been received when in ordinary course of post it would have been delivered, and/or delivered personally, or otherwise proved to have been received.

i) 'virtual completion' shall mean that the work/installation is complete in all respects in the opinion of the Employer and for which the completion/clearance certificate has been issued by the Engineer-in-charge / Consultant and the installation is fit for usage.

j) 'Drawings' shall mean all drawings and/or design drawings furnished by the tenderer / sketches duly signed by the authorised Engineer-in-charge on behalf of the Employer before commencement or during the progress of the work.

k) 'Letter of Acceptance' shall mean an intimation by a letter issued by the Accepting Authority of the Employer to tenderers that his tender has been accepted in accordance with the provisions in the said letter.

l) "Defect Liability Period" shall mean a period of **12 months** from the certified date of virtual completion issued by the Engineer-in-charge and accepted by the Employer.

### 2. SCOPE OF WORKS TO BE CARRIED OUT:

2.1 The work consists of the UPS vendors own design based on technical specifications furnished. The contractor / supplier shall be responsible for its functioning according to the design criteria and its parameters. Notwithstanding the details furnished, any discrepancies shall be brought out in the technical bid highlighting the shortcomings and suggest modifications .

2.2 The work to be carried out under the contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works.

2.3 The descriptions given in the Schedule of Quantities shall, unless otherwise stated, be held to include wastage on material, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labour necessary and for the full and entire execution and completion as aforesaid in accordance with good engineering practice and recognised principles.

2.4 The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawing being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.

2.5 In the case of discrepancy between the schedule of quantities, the specifications and/or the Drawings, the following order of preference be observed:-

- a) Description in Schedule of Quantities.
- b) Particular Specifications and Special condition, if any
- c) Drawings prepared for the design.
- d) BIS Specifications.

2.6 If there are varying or conflicting provisions made in any one or more document(s) forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on contractor.

2.7 Any error in description or quantity or rate in Schedule of Quantities or any omission there from shall not vitiate the Contract or release the contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the Contract.

2.8 The contractor shall forthwith comply with and duly execute any work comprised in such Employer's instruction, provided always that verbal instructions, directions and explanations given to the contractor's or his representative upon the works by the Employer shall if involving a variation be confirmed in writing to the contractor/s within 7 days.

2.8.1 No work for which rates are not specifically mentioned in the priced schedule of quantities, shall be taken up without written permission of the Employer. Rates of items not mentioned in the priced schedule of quantities shall be fixed by the Employer as provided in clause "Variation".

2.8.2 Regarding all factory made products, they shall be manufactured as per their respective IS code updated and all test undertaken at factory.

3. The works shall be carried out at **Mizoram Rural Bank**. The intending tenderer take into consideration the local environment of respective site and himself thoroughly acquainted with local site conditions, nature and requirement of works. Facilities of transport conditions, effective labour and Intending tenderer shall visit the site and make

himself thoroughly acquainted with the local site conditions, nature and requirements of works, facilities of transport condition, effective labour and materials, access and storage for materials and removal of rubbish. The tenderer shall provide in his tender cost of carriage, freight and other charges as also for any special difficulties and including police restriction for transport etc. for proper execution of work as indicated. The successful tenderer will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of any site condition which existed before the commencement of the work or which in the opinion of the Employer might be deemed to have reasonably been inferred to be so existing before commencement of work. Work shall be carried out through qualified electrician & supervised a person with supervisory licence issued by statutory authorities.

#### **4. TENDERS::**

4.1 The entire set of tender paper issued to the tenderer should be submitted fully priced and also signed on the last page of respective chapter (this shall be acceptance of all the pages of the tender and its stipulations) together with initials on every page. Notwithstanding this, Initials / signature in every page will indicate the acceptance of the tender papers by the tenderer.

4.2 No modifications, writing or corrections can be made in the tender papers by the tenderer, but he may at his option offer his comments or modifications in a separate sheet of paper attached to original tender papers.

4.3 The tenderers should note that the tender is strictly on item rate basis and their attention is drawn to the fact that the rates for each and every item should be correct, workable and self-supporting. If called upon by the Employer / Consultant, detailed analysis of any or all the rates shall be submitted. The Employer / Consultant shall not be bound to recognise the contractor's analysis.

4.4 The works will be paid for as "measured work" on the basis of actual work done and not as "lump sum" contract.

4.5 All items of work described in the schedule of quantities are to be deemed and paid as complete works in all respects and details including preparatory and finishing works involved, directly, related to and reasonably detectable from the drawings, specifications and schedule of quantities and no further extra charges will be allowed in this connection. In the case of lump-sum contracts, the payment of such items of work will be made for the actual work done on the basis of lump-sum charges as will be assessed to be payable by the Employer / Consultant.

4.6 The Employer has power to add to, omit from any work as shown in the drawings or described in the specifications or included in schedule of quantities and intimate the same in writing but no addition, omission or variation shall be made by the contractor without authorisation from the Employer. No variation shall vitiate the contract.

4.7 The tenderer shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.

#### **5. SIGNING OF CONTRACT & AGREEMENT:**

5.1 THE successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within **7 days** from the stipulated date of placement of the order, sign an agreement in the standard form of Agreement on non-judicial stamp paper. The contractor shall pay for all stamps and legal expenses, incidental thereto.

## **6. PERMITS AND LICENCES::**

Permits and licenses for the release of materials or its purchases which are under Government control will be arranged by the contractor. It may be clearly understood that no compensation or additional charges can be claimed by the contractor for non-availability of such materials in due time on this account or according to his own requirements.

## **7. GOVERNMENT AND LOCAL RULES::**

The contractor shall conform to the provisions of all local bye-laws and acts relating to the work and to the regulations etc. of the Government and Local Authorities and of any Company whose system and design is proposed to be connected / utilised. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities and shall indemnify the Employer against such liabilities and shall defend all actions arising from such claims or liabilities.

## **8. TAXES AND DUTIES ::**

The tendered rate and cost must include all duties royalties, cess and sales tax, VAT, WCT, service tax or any other taxes or local charges, octroi if applicable. No extra claim will be entertained. Bank will not be providing C-Forms or any such documents. Bank will deduct WCT ( Work Contract Tax ) as per the prescribed rate from the payment and issue certificates in this regard.

## **9. INITIAL SECURITY DEPOSIT, RETENTION MONEY & TOTAL SECURITY DEPOSIT::**

i). Initial Security Deposit : The successful tenderer whose tender is accepted shall be required to furnish by way of Initial security a sum which shall be equal to 2% (two percent) of the accepted value of the tender within 7 (seven days) of the date of issue of the letter of acceptance of his tender, in cash, Demand Draft payable to the Employer or by way of Fixed Deposit or by way of Bank guarantee of any schedule Bank, for the duration of the contract period and defect liability period.

10.1 The Security deposit amount will also be accepted in Fixed Deposit Receipt for the full period of contract or by way of Bank Guarantee of any Scheduled Bank other than Mizoram Rural Bank. The format of the guarantee shall be as approved by the Employer.

10.2 Repayment of Retention Money (Security Deposit) : The retention amount will be refunded to the contractor as detailed below;

50% of the retention amount will be refunded to the contractor / tenderer subject to following conditions:

i). Issue of Virtual Completion Certificate by the Consultant / Employer's engineer-in-charge.

ii). Contractor should remove all their materials, equipments, labour force, temporary sheds/stores etc. from the site.

iii). Contractor Should have completed all the necessary testings, compiled with the inspection remarks & its rectifications if any, submission of all the required particulars, completion drawings, manual of operation & maintenance, test certificates and such other particulars.

10.3 The remaining 50 % of the retention money may be refunded 14 days (fourteen) days after the end of Defect Liability Period provided the contractor has satisfactorily carried out all the works and attended to all defects in accordance with conditions of the contract. No interest is allowed on retention money, security deposit, etc.,

## **11.1 CONTRACTOR TO PROVIDE EVERY THING NECESSARY:**

i). The contractor shall provide everything necessary for the proper execution of the work according to the intent and meaning of the design parameters, technical specifications, drawings and schedule of quantities. Based on the details furnished in the N.I.T. the contractors should undertake their own assessment and design the UPS system required. If the contractor finds any discrepancies furnished it shall immediately brought to the notice of the Employer.

ii). The tenderer shall take full responsibility for adequacy, suitability and safety of all the design, works and methods of design / installation.

iii). The employer shall on no account be responsible for the expenses incurred by the contractor during the progress of work at site, towards any incidental expenditure like medical amenities to the workers at site, security arrangement etc. The employer shall not be responsible for the safety of the workers at site either on account of the works executed by the contractor or on account of the works executed by any other agency involved at that time.

iv). The Employer on no account shall be responsible for storage of materials or loss or pilferage or theft either in respect of the material stored or material already built and paid for by the Employer.

v). The contractor shall at all times give access to workers employed by the Employer.

vi). All tools, equipments and other required facilities for execution of work shall be provided by the contractor.

vii). Any facilities available at site shall be utilized only with prior permission of the Employer or the in-charge of the site / building owner and cannot be taken as granted and for such services utilises the Employer is entitled to charge at his discretion.

11.2 No extra charges shall be paid over and above what has been quoted for any of the above or for similar such services.

## **12. TIME OF COMPLETION, EXTENSION OF TIME & PROGRESS CHART::**

### **i). Time Of Completion:**

The entire work is to be completed in all respects within the stipulated period. The work shall be deemed to commence within 2 days from the date of acceptance letter or date of handing over site, whichever is earlier. Time is the essence of the contract and shall be strictly observed by the contractor.

The work shall not be considered as complete until the Employer have certified in writing that the work has been virtually completed and defect liability period shall commence from the date of such certificate.

### **ii). EXTENSION OF TIME::**

(a) The time allowed for execution of the Works by the Contractor as specified or the extended time in accordance with these conditions shall be the essence of the Contract. If the contractor commits default in the execution of the work as aforesaid, the Employer shall without prejudice to any other right or remedy available in law be at liberty to forfeit the Security deposit absolutely.

(b) Request for extension of time, to be eligible for consideration, shall be made by the contractor to the accepting authority in writing within fourteen days of the happening of the event causing delay. The contractor shall also, if practicable, indicate in such a request the total period for which extension is desired, overlapping period, if any, with earlier events causing delays.

(c) In such case the authority may give a fair and reasonable extension of time for completion of work. Such extension shall be communicated to the contractor by the Employer in writing, within 3 weeks of the date of receipt of such request. Non application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Employer and this shall be binding on the contractor.

(d) The decision of the Employer for an extension of time for completion hereunder ( which decision shall be final and binding on the contractor) shall be promulgated on completion of the work or at the conclusion of such events based on which the extension of time was sought by the contractor, and the Employer shall then, in the event of an extension being granted, determine and declare the final completion date. The provision in clause with respect to payment of Liquidated Damages shall, in such case, be read and construed as if the extended date fixed by the Employer were substituted for and the damage shall be deducted accordingly.

### **iii). Progress of Work :**

During the period of work, the contractor shall maintain proportionate progress on the basis of a programme chart submitted by the contractor or prepared by the employer whoever is responsible for such programme of work. Contractor shall plan for procurement of materials, equipments well in advance and reflect the same in a progress chart so that there is no delay on the part of the contractor in completion of the project. Maintenance and production of such records as and when required shall be the responsibilities of the contractor.

## **13. LIQUIDATED DAMAGES::**

Time is the essence of the contract. The UPS system is essential to commence the computers/equipment to which they are intended for. Thus the tenderer shall be aware and take note that non-supply or commissioning of the equipment / system will affect the Banks committed programs and thus the loss by way delayed services / completion of related works etc, are invaluable and cannot be easily assessed. Therefore, it is part of the agreed terms that in the event of any delay in completion of the work, the Bank is liable to charge the tenderer without the necessity of providing for any details of such losses suffered by the Bank. Further,

13.1 If the contractor fails to maintain the required progress in terms of the contract or to complete the work and clear the site on or before the contract or approved extended date of completion, he shall, without prejudice to any other right or remedy of the Employer on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below or such smaller amount as may be fixed by the employer on the contract value of the work for every completed week that the progress remains incomplete.

13.2 For this purpose the term `Contract Value' shall be value at the contract rates of the work as ordered / accepted.

**Liquidated damages at 1 % of the contract value of the UPS system per week will be levied for every week's delay in the delivery and commissioning of the items beyond the specified period of 5 weeks subject to a maximum of 10%. Part of week will be treated as a week for this purpose.**

13.3 The Employer shall have the right to adjust, / set-off against any sum payable to the contractor under this or any other contract with the Employer anywhere in India/outside India.

## **14. STORAGE OF MATERIALS:**

The contractors shall make use of existing facilities with due permission of the Employer for storage of materials at site, but watch & ward arrangements for the safety of materials shall be the responsibility of the contractor.

## **15. NOTICE AND PATENTS OF APPROPRIATE AUTHORITY AND OWNERS::**

15.1 The contractor shall conform to the provisions of any Acts of the Legislature relating to the work, and to the regulations and bye-laws of any authorities, and or other Companies ( Indian or International), and / or Statutory Authorities, with whose system and design or technical know-how are/were proposed to have connection with this work. So also the contractor shall before making any variations from the drawings or specification that may be associated to so conform, give the Employer / Consultant written notices specifying the variations proposed to be made and the reasons for making them and apply for instruction thereon. The Employer / Consultant on receipt of such intimation, shall give a decision within a reasonable time.

15.2 The contractor shall arrange to give all notices required for by the said Acts, regulations or Bye-laws to be given to any authority, and to pay to such authority or to any public officer all fees that may be properly chargeable in respect of the work and lodge the receipts with the Employer.

15.3 The contractor shall indemnify the Employer against all claims in respect of patent rights, royalties, damages to buildings, roads or members of public in course of execution of work and shall defend all actions arising from such claims and shall keep the Employer aloof and indemnified in all respects from such actions, cost and expenses.

#### **16. CLEARING SITE AND SETTING OUT WORKS:**

16.1 The site of work shown shall be cleared of all obstructions, waste materials, rubbish of all kinds. All material damages on the place of work on the walls, ceiling or flooring or any other connected equipments, materials or installations shall be re-done to maintain the originality and leveled at the contractors own cost.

16.2 The contractors shall set out the works and shall be responsible for the true and perfect setting out the works and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. If at any time, any error shall appear during the progress of any part of the work, the contractor shall at his own expenses rectify such error, if called upon to the satisfaction of the Employer.

#### **17. ACCESS:**

Any authorised representatives of the Employer shall at all reasonable times have free access to the works and / or to the workshops, factories or other places where materials or equipments are being prepared or constructed for the work and also to any place where the materials are lying or from where they are being obtained, and the contractor shall extend necessary facility to the Employer or their representatives for inspection examination and testing of the quality & workmanship of the materials.

#### **18. REMOVAL OF IMPROPER WORK::**

18.1 The Employer shall during the progress of the work have power to order in writing from time to time the removal from the work within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Employer / Consultant are not in accordance with specification or instructions, the substitution or proper re-execution of any work executed with materials or workmanships not in accordance with drawings and specifications or instructions.

18.2 In case the contractor refuses to comply with the order the Employer shall have the power to employ and pay other agencies to carry out the work and all expenses consequent thereon or incidental thereto as certified by the Employer / Consultant shall be borne by the contractor or may be deducted from any money due to or that may become due to the contractor. No certificate which may be given by the consultant shall relieve the contractor from his liability in respect of unsound work or bad materials or design.

#### **19. ACCOUNTS RECEIPTS & VOUCHERS:**

The contractor shall, upon the request of the Employer furnish them with all the invoices, accounts, receipts and other vouchers that they may require in connection with the works under this contract. If the contractor shall use materials less than what is required under the contract, the value of the difference in the quantity of the materials that was required to use and that actually used shall be deducted from his dues. The decision of the Employer shall be final and binding on the contractor as to the amount of materials the contractor is required to use for any work under this contract.

#### **20. PAYMENT TERMS, ADVANCE PAYMENT & ITS RECOVERY:**

20.1 Payment Terms:

i). All bills shall be prepared by the contractor in the form agreed or furnished by the Employer.

ii). **Payments to the contractor will be regulated as below:**

1. No Advance will be paid
2. No RA Bill will be entertained and the final Bill will be paid on satisfactory completion of the works as per measurement of actual quantity
3. The bill may be submitted to "The Chairman, Mizoram Rural Bank, Head Office, MINECO, Khatla, Aizawl, Mizoram" for payment of bills after complete and satisfactory delivery of the item.
4. The GST number of MIZORAM RURAL BANK :**GSTIN 15AAAAM1725F123**

#### **21. DEFECT AFTER COMPLETION:**

The contractor shall make good at his own cost and to the satisfaction of the Employer all defects, or other faults which may appear during the defect liability period. In case of specialised work based on the contractors own design and their standard manufacturing product incorporated in the works and in the event of the design of the system being defective or any components used found to be defective on account of manufacturing defects or otherwise forcing, any improvement thereof to be implemented or undertaken to rectify such inherent defects, notwithstanding additional cost of components or design modification, they shall be undertaken at contractor's own cost.

In default, the Employer may employ and pay other agency or persons to amend and make good such damages, losses and expenses consequent thereon or incidental thereto such expenses shall be made good and borne by the contractor failing which the same shall be recoverable from the payment due to the contractor and in the event of amount retained being insufficient, recover the balance from the contractor from the amount retained under clause no 12 together with any expenses the Employer may have incurred in connection therewith.

#### **22. ESCALATION:**

The rate quoted shall be firm throughout the tenure of the contract (including extension of time, if any granted) and will not be subject to any fluctuation due to increase in cost of materials, labour, sales tax, octri etc. unless specifically provided in these documents.

### **23. IDLE LABOUR:**

Whatever the reasons may be, no claim for idle labour, additional establishment cost of hire and labour charges of tools and plants would be entertained under any circumstances.

### **24. SUSPENSION / TERMINATION OF THE CONTRACT:**

Bank reserves the right to suspend / terminate the contract by giving 15 days notice in event of;

24.1 The vendor delays the supply.

24.2 If in Bank's opinion, the information and details furnished by the tenderer is found to be false, misguided the Bank or such other act of withholding sensitive information of the product etc.,

24.3 If Bank concludes that tenderer will not be able to fulfill his contractual obligation. Notwithstanding what is mentioned above; Bank will not be liable to explain to the tenderer the reasons for such action.

### **25. SETTLEMENT OF DISPUTES AND ARBITRATION:**

25.1 It shall be an inseparable part of the contract that in matters regarding quality of materials, workmanship, or rejection of improper supply, interpretation of specifications, commitments made etc, the decision of the Bank, which shall be given in writing, shall be final, conclusive and binding on the tenderer.

25.2 If the tenderer considers that any decision of the Bank is unacceptable and issue cannot be resolved mutually, the tenderer may request for arbitration in writing within 15 days of such happening. Thereon, the Employer shall give his written instructions or decision within a period of 30 days from the receipt of the tenderer's letter. All disputes or differences in respect of which decisions have not been final, binding and conclusive as above shall be referred for arbitration by a Sole Arbitrator in accordance with the provisions of the Indian Arbitration and Conciliation Act, 1996.

### **26. RIGHT TO AUDIT/TECHNICAL EXAMINATION::**

The Employer shall have the right to conduct an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made even after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the tenderer under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the tenderer shall be liable to refund the amount of over-payment and it shall be lawful for the Employer to recover the same from him in the manner prescribed in the tender document or in any other manner legally permissible and if it is found that the tenderer was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by the Employer to the tenderer, without any interest thereon; Provided that the tenderer shall not be entitled to payment of any sum paid short where such payment has been agreed upon between the Employer on the one hand and the tenderer on the other under any term of the contract permitting payment for work after assessment by the Engineer-in-Charge.

### **27. LIEN :**

(a) Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the contractor, the Employer shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the tenderer and for the purpose aforesaid, the Employer shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalisation or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Employer shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Employer pending finalisation or adjudication of any such claim.

(b) Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Employer or any other contracting person or persons through Engineer-in-Charge against any claim of the Employer or such person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Employer or with such other person or persons.

(c) It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Employer will be kept withheld or retained as such by the Employer till the claim arising out of or under the contract is determined by the arbitrator (if the contracts governed by the arbitration clause) or by the competent court, as the case may be and that the tenderer will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the tenderer. For the purpose of this clause, where the tenderer is a partnership firm or a limited company, the Employer shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.

### **28. EXTERNAL INSPECTION & AUDIT:-**

- (i) All works under or in course of execution or executed in pursuance of the Contract shall at all times be open and accessible to the inspection of the Quality Control Organisation of the Employer or any designated auditor / officials of the Employer and of the Chief Technical Examiner's Office under Central Vigilance Commission.

(ii) If it shall appear to the Engineer-in-Charge / consultant or to the Engineer in charge of Quality Control or any designated auditors / officials of the Employer or to the Chief Technical Examiner, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand made in writing within the defect liability period from the Engineer-in-Charge / consultant specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for earlier, forthwith rectify, or remove

and reconstruct the work so specified in whole or in part, as the case may require and provide other proper and suitable materials or articles at his own charge and cost.

(iii) In the event of the contractor failing to do so within a period specified by the Engineer-in-Charge / Consultant in his demand aforesaid, the contractor shall be liable to pay compensation at the same rate as under the clause of defects after completion for this default.

(iv) In such case the Engineer-in-Charge / consultant may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the Employer or the competent authority may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and without substantially affecting the utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same shall be final and binding on the tenderer.

Signature of the Tenderer/  
Contractor (With Seal)

## "SCHEDULE - I "

### **TECHNICAL SPECIFICATIONS FOR DESIGN, MANUFACTURE, TESTING AT SHOP AND SUPPLY, INSTALLATION & COMMISSIONING OF UPS SYSTEM, ITS ACCESSORIES AND ALLIED WORKS AT SITE:**

The UPS being the own design of the UPS vendor, it shall be suitably designed manufactured, tested at shop and supplied. The design standards, materials or components used manufacturing process shall all conform to the respective BIS Code and any other standards mentioned elsewhere in this tender as applicable. However, the following specifications, technical parameters, etc, are furnished by way of basic or minimum requirement for the end result. The tenderer shall be solely responsible for the entire design/ specification, safety aspects of the entire UPS system and related works as detailed in the tender notwithstanding the specifications furnished hereunder.

#### **A. SCOPE OF SUPPLY:**

**1. The Main System:** ON-LINE Un-interrupted Power Supply (UPS) System comprising of 5 KVA UPS & 10 KVA with hot standby redundancy configuration as per the details indicated in the price bid, battery source, related software for interface compatible with lan / unix system shall be designed by the manufacturers own technology and standards but it shall also meet the required parameters detailed below apart from the standard design parameters of the manufacturers. They shall be manufactured, tested at factory for its quality and performance. Such units shall be supplied, installed and commissioned at site and undertaking allied works like interlinking UPS system with battery, input power supply to the UPS system, output etc.

#### **2. Parallel Operation:**

**In nutshell, the whole system comprising of 5/10 KVA systems should be configured in hot stand mode with battery bank. The battery bank should give 24 hours back up. The outputs of the UPSs terminate over a paralleling panel. Single/ 3-phase outgoing feeder from paralleling panel should terminate over the distribution boards for connecting to equipments.**

**For hot standby operation of 5 /10KVA UPS systems, where total load will be Main UPS & in case of failure of main UPS the total load should be fully taken over the other stand by UPS, without interruption.**

**If both the UPS fails, the loads should be transferred to bypass without interruption in power supply.**

**The design of the UPS should be such that there shall not be any common parts in parallel circuit, which will lead to single point failure.**

**If parallel circuit is removed, both UPS should be able to work independently without any modifications.**

**It should be possible to isolate the failed UPS for repairs without the power output of other UPS.**

#### **3. System Maintenance:**

**Each UPS system will be serviceable independently and at the same time at-least one UPS system should be available to serve load. Any scheduled maintenance actively will be carried out without disrupting load at any point of time.**

#### **4. ACCESSORIES:**

Batteries of required inverter voltage (DC) and AH rating suitable for required back up time, suitable container for batteries between battery source and UPS system. **Copper cable of 90% and above purity of appropriate size and current carrying capacity between battery source and UPS system should be used. The cable size, the current carrying capacity should be highlighted. The type of copper cable should be mentioned. Any other unspecified but related to installation of UPS system, materials required for fixing the UPS system.**

#### **5. INSTALLATION & COMMISSIONING:**

**Moving, unloading & Positioning of UPS system alongwith necessary electrical, batteries and interconnections etc. Cabling between batteries to UPS system and between UPS system to the input power source and output power point. Necessary pre-commissioning, testing and load testings for 24 hours upon installation should be conducted by the successful vendor.**

**6. Drawings & Manuals :** Being a self designed electrical equipment, preparation and submission of drawings, submission of users manual, operation and preventive measures to be taken etc., shall be furnished in duplicate and all other details that are essential for its operations.

**7. Site Conditions:** The various aspects and the condition of the site and layout needs to be well understood in executing the specified work. The input power to the UPS system could be either by way of Electricity Board Power or by means of DG Power. The UPS system shall be capable of receiving either source of power at fluctuating voltage and frequency and deliver the design output conditions as specified in para B of this schedule. The location will be within the specified City limits and with its inherent conditions.



**8. Bank's Scope of Work:** The Bank shall arrange for input power supply with necessary input supply. Necessary input and output cabling up to the designated point of UPS location, and output distribution cabling and control system will be undertaken by the bank. However the necessary assistance & guidance shall be under the scope of the supplier. Existing earthing arrangement shall be extended to the system.

9. The below mentioned specifications furnished are broad guidelines for the UPS system base` on the tenderer's own design and manufactures standard system. Wherever the specifications are not furnished or specific, the specification shall be as per their respective IS standards / ISO standards or as per best engineering practice and they shall not be diluted.

**(B) TECHNICAL SPECIFICATIONS FOR 5/10 KVA DIGITAL SIGNAL PROCESSING (DSP)  
CONTROLLED ON LINE UPS SYSTEM:**

Specifications	Bank's Requirement	Accepted / Not Accepted (Please filled in )
<b>Technology</b>	a. UPS systems with DSP controlled IGBT based rectifier technology in True on line configuration with double conversion using IGBTs in the inverter and converter. b. Provision for configuring 2 UPS systems in parallel load sharing mode. c. UPS should consist of converter/ Rectifier, Battery Charger, Static Inverter with static switches, Static bypass switch and isolation transformer d. Input Active power factor correction	
<b>Rating (output power max.)</b>	5/10 KVA Hot Standby UPS systems with battery bank	
Power Consumption	Please Specify @ Full Load @ 75% Load	<u>In KW</u> <u>In</u> <u>amps</u>
Model Name Model No. Year of design Manufactured by	Please Specify	

Specifications	Bank's Requirement	Accepted / Not Accepted (Please filled in )

<p><b>INPUT</b></p> <p>Phase</p> <p>Nominal Input Voltage</p> <p>Nominal Input Voltage Range</p> <p>Frequency</p> <p>Nominal frequency Range</p> <p>Input Power Factor with auto input P.F correction system</p> <p>DG Compatibility</p> <p>Input over voltage protection</p> <p>Input under voltage protection</p> <p><b>Rectifier</b></p> <p>Input Current THD</p>	<p>Single Phase</p> <p>230 Volts AC</p> <p>+ or - 25% AC (on full load)</p> <p>50 HZ</p> <p>45 Hz to 65 HZ</p> <p>Better than 0.96</p> <p>Should be provided</p> <p>Should be provided</p> <p>Should be provided</p> <p><b>IGBT</b></p> <p>Less than or equal to 4%</p>	
<p><b>OUTPUT</b></p> <p>Phase</p> <p>Output Voltage</p> <p>Output Voltage Range</p> <p>Frequency</p> <p>Output Power Factor</p> <p>DG Compatibility</p> <p>Input over voltage protection</p> <p>Input under voltage protection</p> <p><b>Rectifier</b></p> <p>Input Current THD</p>	<p>Single Phase</p> <p>230 Volts AC</p> <p>+ or – 1 % V AC (on full load)</p> <p>50 HZ</p> <p>Better than 0.96</p> <p>Should be provided</p> <p>Should be provided</p> <p>Should be provided</p> <p><b>IGBT</b></p> <p>Less than or equal to 4%</p>	
<p><b>Isolation Transformer</b></p>	<p>UPS output is isolated from mains input and battery ( Galvanic Isolation Transformer)</p>	
<p><b>Battery Backup</b></p> <p><b>Backup Period</b></p>	<p><b>UPS will be configured with 24 Hrs battery backup at 100% load</b></p> <p><b>(Vendors are requested to arrive at the required Battery AH capacity depending on their DC bus voltage of the UPS. Please furnish detailed battery capacity calculation showing AH and no of batteries without fail)</b></p> <p><b>Total 26000 VAH (100AH -22 pcs)</b></p>	

Minimum Total VAH required per UPS.	Sealed Maintenance Free Batteries	
Battery Type and Make	Make- Exide etc.  Complete with self standing closed MS Cubicle or cabinet must be provided by the vendor	
Battery Housing	Required Required Required Should not exceed 12 hours	
Audible Alarm for  a) Battery Low b) Mains Failure c) UPS Failures	The facility to start the UPS even if main power is not there at the time of starting. The system should draw current from the batteries and start. This should be demonstrated at the time of installation.	
Battery re-charge time from fully discharged to 100% charged condition		
Cold start		

Specifications	Bank's Requirement	Accepted / Not Accepted (Please filled in )
Charger Type	Constant Voltage, Constant Current (The charger should be designed for atleast 15% of total battery current). <u>The charger should be preferably temperature compensated with automatic battery test.</u>	
Voltage Regulation	+/- 1%  < 1%	

Ripple(Without Batteries )  Battery Recharge Time from fully discharged condition to 100% charged condition.	Should not exceed 12 hours.	
Transient Response  Response Time	+/- 5% (100 % load step)  Less than 60 mili seconds	
<b>Automatic Static by-pass switch facility to mains in case of UPS failure</b>	Should be provided & should take care of 100% uninterrupted transfer of load from UPS (synchronous bi-directional static switch with zero transfer time).	
<b>Manual By-Pass Switch</b>	Built-in Manual By-Pass should be provided	
<b>Overall Efficiency( AC to AC )</b>	<b>Greater than 92 % in online mode</b>	
<b>Display Panel</b>	Built in LCD/LED Display  Input Voltage  Output Voltage  Heat Sink Temperature  Battery Voltage  Output Current (%)  Output Frequency etc	
<b>Indications</b>	AC Mains line  Battery on  Mains abnormal/ out of range  Load on UPS  Load on battery  Inverter mode  Load on Auxiliary/ bypass  Inverter trip	
<b>Protection for</b>  (Audible alarms should be provided for important protections)	Input MCB  Input single phasing/ reversing  Rectifier Over/ under Voltage Battery MCB  Battery Low  Battery Charging Current Limit Output under Voltage  Output Over voltage,  Inverter over Temperature  Output Overload  Output Short circuit etc, overheat  Surge Protection	

Specifications	Bank's Requirement	Accepted / Not Accepted (Please filled in )
<b>Interface facility</b>	<p>The UPS system should have necessary hardware and software a) RS 232 to work on existing operating systems</p> <p>b) Remote Management.</p> <p>There should be a facility to monitor and broadcast to all workstations, whenever necessary, conditions such as</p> <p>i) Power failure: UPS working on batteries preferably to indicate present load in percentage, time up to which batteries can support with present load &amp; warning well in advance of shutdown of the system.</p> <p>ii) The software should be capable of automatically closing the files so that the data on our computers are not lost/ corrupted.</p>	
<b>Remote Indication Unit</b>	In system Administrators room with indications like mains on, inverter on/off/faulty/trip/battery low and static bypass switch on 50 mtrs interconnecting cable to be included in the price bid.	
<b>Environmental</b> Operating Temperature Storage Temperature Humidity Audible Noise level Cooling Enclosure Protection	0-45 Deg C ( Continuous ) 0- 55 Deg C 10-90% ( Non Condensing ) < 52 dB at full load upto distance of 1 mtr forced air IP 20	
<b>Warranty</b>	UPS and batteries should have 2 year warranty from the date of supply.	
<b>External Testing Certificate</b>	<b>Must</b>	
<b>Buyback offer</b>	<b>Please confirm</b>	

**Signature of the Tenderer  
(With Seal)**

" SCHEDULE - II "

**SPECIAL CONDITIONS AND DETAILS OF TESTING TO BE UNDERTAKEN FOR THE WORK OF SUPPLY, INSTALLATION, & COMMISSIONING OF 5/10 KVA UPS SYSTEM AND BATTERIES:**

1.0. **Time is The Essence of Contract** : The tenderer are requested to note that the UPS system is to be provided for Bank's sensitive equipments and if for any reasons the work of supply & commissioning is delayed the Bank's reputation and commitments will be affected and penalty stipulated as per liquidated damages will be levied with-out any requirement on the part of the Bank to establish the actual loss in monetary terms. This aspect shall be the terms of this tender and will be binding on the tenderers.

2.0. Power Consumption: Being a techno-economic project, the power consumption, overall efficiency of the UPS system, AMC charges and annual recurring expenditure shall be assessed and these aspects shall be one of the criteria in evaluating the cost economics besides the initial capital cost. Therefore the tenderer shall furnish the required particulars to establish the economics. The rated performance shall be subject to testings and any shortfall shall be liable for penalization.

The details of power consumption of the entire UPS system at input level, including the battery charging power shall be furnished for at full load conditions **AND** at 75 % load conditions Further, its corresponding Invertor efficiency and overall efficiency shall also be furnished.

3.0. The tenders shall quote for a TWO YEAR WARRANTY for all the equipment quoted by them.

4.0. MAINTAINANCE OF UPS EQUIPMENT

A) MAINTAINCE DURING DEFECT LIABILITY PERIOD OR WARRANTY PERIOD

The tenderer shall maintain the UPS Equipment free of cost and ensure that it works as per tender parameters. All spares required for normal operation as per tendered para-meters shall be replaced at no extra cost. The number of visits shall be same as stipulated in Comprehensive Annual Maintenance.

B) COMPREHENSIVE ANNUAL MAINTAINANCE. (CAM) (after the defect liability period)

The tenderer shall maintain the UPS equipment for a period of one years after the expiry of defect liability period and ensure that it works as per the tendered parameters. The rate of annual maintenance charges shall be furnished for a period of 1 years after the expiry of warranty/defect liability period and the rates quoted shall be binding on the tenderer.

5.0 The testing & performance parameters :

The following pre-delivery test shall be conducted at factory /manufacturing place and necessary test certificates shall be furnished before dispatch for all the technical parameters including the full load test as specified.

- 1>. Line Regulation Test & No- load regulation test
- 2>. Load Regulation Test at full, & 75% load.  
( on both resistive & reactive load @ 0.8 pf)
- 3>. Overloading Conditions
- 4>. Invertor Efficiency at full load.
- 5>. Overall Efficiency at full load.
- 6>. Transient Response
- 7>. Response (Recovery) Time
- 8>. Testing of Protection; Short Circuit, Under / Over Voltage conditions.
- 9>. Total harmonic distortions.
- 10>. Load Crest Factor.
- 11> Wave form test on resistive and inductive load
- 12> Noise level test
- 13> Battery backup time cutoff and alarms test at site.

After, physical installation, the UPS shall be tested and commissioned at site by the manufacturers engineers such as voltage, frequency, input current, harmonic distortion, output voltage harmonic distortion, input power factor, efficiency, noise level, overload capacity as specified herein.

The power consumption shall be established at site by using **standard power analyzers** using external load brought by the tenderer for a continuous period of 24 hours. Load test shall also be established at site by using an external load to be brought at specified time as decided by the bank. All the activities under this clause shall be completed within the stipulated time schedule.

**6. EXTERNAL TESTING: Testing of UPS should be carried out from reputed testing centers like Electronics Test and Development Centre, (ETDC) Dept. of Electronics, Govt. of India, or other reputed testing centre approved by the Government of India. The tenderer shall be liable to subject the UPS system to such testing.**

**The cost of such testing and transportation shall be borne by the UPS VENDORS ONLY. Also the cost of damages during transportation to the testing centre up & down, rectifications of the system or any of its components resulting out of such testings etc. shall be on the part of the tenderer and the employer shall not be responsible for any cost or loss incurred by the tenderer while undertaking the testings.**

7.0. Penalty Clause Against Deviation From Committed Parameters : The tenderer are requested to furnish the technical parameters like overall efficiency, power consumption, capacity of the UPS system and other technical parameters after careful study. In case the actual parameters obtained at site and test results differs from those stipulated in the offers, the tenderer will have to be prepared for penalty for the shortfall in the capacity as well as higher power consumption. The following methodology

shall be adopted for computing the quantum of penalty. A tolerance of 5% of the committed parameter in case of power consumption may be condoned by the accepting authority at his discretion.

In case of other parameters, as the UPS system is critical in nature, if the shortfall is likely to result in un-reliable operating conditions on " ON LINE " concept, the entire UPS may be rejected and the contractor is liable for repayment of entire amount paid by the employer and the Initial Security Deposit is liable for forfeiture. This is without any prejudice to initiate any legal action by the Bank and damages eligible for. The Bank has the option to revoke the Bank Guarantee.

7.1. Capacity of the Equipment: In case of any shortcomings, the difference between the committed capacity and the actual capacity measured at site or external testing centre shall be guiding factor to determine the quantum of penalty. The pro-rata cost reduction shall be effected by the following formula:

$$\text{Quantum of penalty} = \frac{\text{Cost of UPS system ( Note-1)} \times \text{Difference in capacity} \times \text{Penalty Factor>(*N2)}{\text{Committed Capacity of UPS system}}$$

Note : 1). Cost of UPS system excludes battery cost & software cost.  
2). Penalty factor will be 1.5 times.

7.2. Power Consumption: In case of short comings in power consumption, the difference between committed value and actual value will be converted into Units per hour (KWH). Excess power consumed over a period of 6 years at 8 hours per day on full load condition for 300 days an year shall be assessed and 20% of such assessed quantum will be liable for recovery. The actual consumption of power will be subject to assessment made by the consultant / Bank Engineer in the similar manner while undertaking the assessment made while evaluating the project. The accepting authority may at his discretion may evaluate in comparison with other offers and extend any or some relief which shall be binding.

8. Departure From Specification : Schedule of departure from the specification if any, shall be furnished by the tenderer in technical and commercial bid along with implication on the system and cost.

Signature of the Tenderer.  
( With seal )

SCHEDULE III

**SCOPE OF COMPREHENSIVE ANNUAL MAINTAINANCE CONTRACT**

The tenderer shall offer the following at no extra cost to the bank. The rate quoted for CAMC should include the following.

1. The tenderer shall maintain the UPS System and ensure that it works as per the tendered parameters.
2. All the repairs and replacements of spares shall be carried out which are necessitated due to usage of system as per tender stipulations. However the repairs and replacements necessitated by loss or damage due to misuse or accident, fire or natural calamities shall be out of the scope of CAMC.
3. The tenderer shall inspect the equipment at least once in a month as a part of preventive Maintenance. This is apart from any breakdown visits that may be required which may emanate in between the two preventive maintenance inspections.
4. The maximum breakdown time shall be one hour from the time of receiving the complaint over phone. If the tenderer is not in a position to set right the defect or repair and put back the UPS to working condition within one hour, a standby unit of to suit the tender parameters should be provided immediately.
5. During the Preventive Maintenance the tenderer shall inspect/ check the equipment and record the following in log book, which shall be verified and confirmed by the bank's representative.
  - a. UPS System : Any malfunctioning of the components.
  - b. Any other remarks regarding the Electrical System:
  - c. Any steps to be taken by bank for working of UPS system.
6. During the preventive Maintenance inspection tenderer shall carryout the following apart from the other requirements for functioning of system as per tender parameters and same shall be recorded in a log book which shall be verified and confirmed by bank's representative.

UPS System: i. General cleaning. ii. Lose contact.
7. During the break down calls, the nature of repair carried out, parts replaced etc shall be recorded in the log book.

**OTHER TERMS WITH REGARD TO CAMC:**

The rate of annual maintenance charges shall be furnished for a period of 1 year after the warranty/Defect Liability Period and rates quoted shall be binding on the tenderer. The scope and terms of Annual Maintenance Contract like number of monthly visits, items covering under Annual Maintenance Contract, replacement of spares exclusions if any, down time for break down and service calls shall be as per as per the bank terms. The Bank reserves the right of discontinuing the Annual Maintenance Contract from the contractor during the tenancy of Annual Maintenance Contract. The cost of Annual Maintenance Charges shall also be one of the criteria in evaluation of cost economics of the tender.

**The Annual Maintenance Charges shall be paid once in six months after providing six month satisfactory maintenance i.e. six month post service.**

**The UPS vendor has to maintain the equipment supplied for at-least 10 years after the expiry of warranty period. At the same time, the vendor is expected to make available the spare parts for the systems for atleast 10 years after the expiry of warranty period. Thereafter, vendor will give 12 months notice prior to discontinuation of services. AMC amount for the four year after warranty period will be calculated to decide Lowest Vendor.**

Signature of the Tenderer.  
( With seal )



**MIZORAM RURAL BANK**  
**(THIS PART OF THE TENDER SHOULD BE SUBMITTED IN A SEPERATE ENVELOPE)**

**PRICE BID**

Sl.no.	Item description	Qty & unit	Unit rate in Rs.	Amount in Rs.
1.	Design, manufacture, testing at factory, supply, installation, commissioning and testing of state of the art <b>5 /10KVA capacity Single Phase input Single phase output Digital Signal Processing controlled, IGBT Rectifier Technology based online UPS system</b> complying all technical specifications / features/ international standards as described in the tender document.			
2.	Supply, installation, testing and commissioning of <b>Make- Exide etc.</b> make <b>SMF batteries</b> to provide required battery backup of 24 hrs and complying all technical specifications indicated in the technical and commercial bid. <b>The battery bank rate shall include the cost of closed battery rack to house all the batteries.</b>			
3.	Comprehensive annual maintenance charges for the above set consisting of <b>entire 5/10 KVA UPS AFTER 2 YEAR. To calculate Lowest Vendor AMC amount for first 1year (after warranty period ) will be calculated</b>			
	1 <sup>ST</sup> YEAR	1 SET	Rs.	PER ANNUM
	<b>TOTAL OUTGO FOR FOUR YEARS</b>			

**SIGNATURE OF THE TENDERER WITH SEAL**