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No. MMDSL/1/pro/med/Equipment/2024(21)

Dated: 05/09/2024

# **NOTICE INVITING TENDER**

## FOR SUPPLY, INSTALLATION AND COMMISSIONING OF GENERATOR, UPS, STABILIZER, EARTHING AND INVERTER

### FOR MEGHALAYAN MEDICAL DRUGS & SERVICES LTD

#### Single Cover-2 Bid System

Sealed Tenders in a Two Bid System along with affixed court fee stamp of Rs. 25/- is invited by the Managing Director, MMDSL, Meghalaya from registered firms for "FOR SUPPLY, INSTALLATION AND COMMISSIONING OF GENERATOR, UPS, STABILIZER AND INVERTER FOR MEGHALAYAN MEDICAL DRUGS & SERVICES LTD "

Technical & Financial Evaluation of the Tender Documents would be evaluated by a Tender Committee duly constituted the Managing Director, MMDSL, Meghalaya.

Detailed tender papers may be obtained from the O/o Managing Director, MMDSL, Shillong.

- 1. **Cost of Tender Documents**: Can be obtained from the Meghalayan Medical Drugs and Services Limited, Shillong, or downloaded from <a href="https://mmdsl.in">https://mmdsl.in</a>
  - 1. Name of the Work: FOR SUPPLY, INSTALLATION AND COMMISSIONING OF GENERATOR, UPS, STABILIZER, EARTHING AND INVERTER FOR MEGHALAYAN MEDICAL DRUGS & SERVICES LTD.
- 1. Date or downloading/obtaining the Tender Documents: 06/09/2024
- 1. Last date and time for submission of Tender Document: 23/09/2024 at 11:30 am.
- 1. Tender opening date and time: 24/09/2024 on 2 pm
- 1. Date for Financial Bid Opening: Financial Bid of Technically qualified bidders only will be opened subsequently on a date that will be notified later.

(The document is digitally approved and does not require any Seal or Signature in original)



Note:

- 1. The Managing Director, MMDSL, Meghalaya, Shillong reserves the right to accept or reject and or all tender without assigning any reason thereof.
- 2. Any changes or any further notification in respect to the above Tender documents shall be made available only at the above mentioned website. Hence respective bidders are advised to visit the website regularly for the above purpose.

Shri Ramkumar S Managing Director



To,

The Managing Director, MMDSL, Meghalaya, Shillong.

Tender for the Work: - " FOR SUPPLY, INSTALLATION AND COMMISSIONING OF GENERATOR, UPS, STABILIZER, EARTHING AND INVERTER FOR MEGHALAYAN MEDICAL DRUGS & SERVICES LTD."

Sir,

I/We submit here under the following documents duly attested for favor of your consideration.

- 1. A Valid company/Firm registration certificate
- 2. A Valid Trade License Certificate from Competent Authority.
- 3. A Valid GST Registration certificate
- 4. PAN/TIN Card of the firm or of the person in whose name the Proprietorship, Firm

etc. is registered under.

- 5. Court fee stamp of required amount.
- 6. Latest attested GST Returns.
- 7. Latest attested Professional Tax Clearance certificate for the year
- 8. Schedule Tribe/caste certificate if applicable.
- 9. The Power of Attorney in Original or in court certified copies.
- 10. Audited Balance Sheet for the last 3 (Three)years by Chartered Accountant.
- 11. Original copy of Banker's Certificate

12. Attested copy of Purchase Order, Work Orders/Installation Report/Completion Report/Appreciation Letter.

13. And all other document required as per the terms and conditions of the detailed N.I.T.

I/we have gone through the terms and conditions of the detailed N.I.T and agreed to abide by the proposed terms and conditions. I/We therefore sign and return the tender documents in Original in sealed cover A

Yours faithfully,

Enclosed:-Tender document in original and all relevant certificates.

Dated

Signature of Supplier/firm

Complete Postal Address



#### A. ELIGIBILITY CRITERIA: -

1. All Annexure should be duly filled and complete in all respects.

2. Submission of EMD amount of Rs. 50,000/- (Rupees FiftyThousand) shall be in the form of Demand Draft/BG/FDR in favor "Managing Director, MMDSL, Meghalaya, Shillong. EMD should be valid for a minimum period of 90 days from date of Tender opening.

3. In Addition to the above, the bidder should furnish the following:-

- i. A Valid company/Firm registration certificate
- ii. A Valid Trade License Certificate from Competent Authority.
- iii. A Valid GST Registration certificate
- iv. PAN/TIN Card of the firm or of the person in whose name the Proprietorship, Firm etc. is registered under.
- v. Court fee stamp of required amount.
- vi. Latest attested GST Returns.
- vii. Latest attested Professional Tax Clearance certificate for the year
- viii. Schedule Tribe/caste certificate if applicable.
- ix. The Power of Attorney in Original or in court certified copies.
- x. Money receipt in Original for purchase of tender papers.
- xi. Audited Balance Sheet for the last 3 (Three) years by Chartered Accountant.
- xii. Original copy of Banker's Solvency Certificate

4. Affidavit to be submitted on Non-Judicial Stamp paper attested by Public Notary that there is no vigilance/ CBI case or arbitration cases pending.

5. The Applicant should Provide accurate information on any pending litigation or arbitration resulting from completed or under execution over the last 5 (five) years. A consistent history of awards against the applicant or any partner of a joint venture may be liable for rejection of the bid.

6. The tenders received after the due date and time specified or unsealed or incomplete, or by facsimile or email will be summarily rejected.

7. Bidder average annual turnover for the last 3 years should be minimum 50 lakh.

#### **B.** SUBMISSION OF TENDER:

The tender shall be Submitted in the following order: -

1. The Pre-qualification Bid/ Technical Bid shall be super- Scribed "SEALED COVER A" and shall consist of the following: -

- 1.1 A covering letter from the tender.
- 1.2 A list of documents accompanying the Tender.

1.3 Tender fee  $\gtrless$  2000/- (Rupees Two Thousand Only.) if Tender document is obtained from the office of the undersigned.

1.4 Tender document duly filled and signed by the authorized person in all pages.



1.5 Duly executed power of Attorney in case of partnership/ firm.

1.6 Latest attested copies of GST Clearance, Income tax clearance, PAN card and professional Clearance certificates.

1.7 Non-refundable Court Fee Stamps of  $\gtrless$  25/- (Rupees Twenty-five Only.) only Purchased in Meghalaya has to be affixed in the tenders while submitting the same.

1.8 The detailed N.I.T document duly signed on every page as a token of acceptance by the intending Bidder.

1.9 Relevant OEM Authorization as per Annexure III

1.10 Compliance of Specification as per Appendix -I

1.11 Any other information required to be submitted in according with the detailed N.I.T document.

1.12 Audited Balance Sheet for the last 3 (three) years & Average Annual turnover.

1.13 Original copy of Banker's Solvency certificate.

1.14 Attested copies of past Purchase/Work/Supply Orders with Installation reports Completion/Appreciation certificate as mentioned in Technical Specifications.

1.15 Affidavit to be submitted on Non-Judicial Stamp paper attested by Public Notary that there is no vigilance/ CBI case or arbitration cases pending

1.16 Blacklisting

1.17 The Applicant should Provide accurate information on any pending litigation or arbitration resulting from completed or under execution over the last 5 (five) years. A consistent history of awards against the applicant or any partner of a joint venture may be liable for rejection of the bid.

2. The Price bid/tender showing the total cost for of work shall be given separately in Annexure- B enclosed in the detailed N.I.T. The Annexure- B shall be detached from the detailed N.I.T document and shall be submitted in a separate sealed cover super – scribed "SEALED COVER B (RATES)".

2.1 The rates shall be quoted both in figure and in words. The discrepancy between the amount in figure and in words, the amount in words shall govern.

3. Both the *Sealed Cover A and Sealed Cover B* shall be submitted together in another cover.

3.1 The inner and outer envelope (Sealed Cover) Shall: -

3.1.1 Be address to the Managing Director, MMDSL, Health Complex, Laitumkhrah, Shillong.

3.1.2 Bear the following identifications: -

3.1.2.1 Particular description of the work.

3.1.2.2 Name and complete postal address of the Bidder(s) to enable to return the un-opened tender in case it is declared as received late or is otherwise, unaccepted.

4. The Managing Director MMDSL, Meghalaya Shillong will not take any responsibility for non-Receipt or delay in receipt of detailed N.I.T.

5. RATES:

5.1 Rates for the work mentioned in the fore-going clauses are to be quoted on Annexure B. Rates quoted in words and figure shall be inclusive of all prevailing Taxes in the State of Meghalaya.

6. The Bidders shall prior to submitting this tender for the work, examine drawings, conditions of contract and the specification of work. They shall also inspect the site and satisfy



themselves on their own as to the physical conditions prevailing at site, the nature, extent and practicability of the work existing access to the site, power supply and other facilities, The availability of different materials and their adequacy for the execution of the work, Labour and probable Site for Labour camp, stones, go-down etc. They shall take into consideration the local conditions, obstructions in work; if any over the entire period required for completion of the work. They shall themselves obtain the necessary information as to risk contingencies and the circumstances which may affect or influence their tender. Other change consequence on any misunderstanding of otherwise shall not be allowed after casting their tender.

7. The Bidders shall be deemed to have full knowledge of the site, whether he inspects it or not, Extra charge consequence to any misunderstanding or otherwise shall not be allowed.

#### C. GENERAL TERMS AND CONDITIONS

1. Valid Authorization letter (Tender specific) mentioning the above Tender no. from the Relevant Manufacturers only for supply & participation in Tender as per Annexure III

2. High Quality Standards/ISO certificate/IEC international safety, and other certificates as specified in Technical Specifications & Requirements from a Bidder.

3. OEM Should have a Product and Spare Ware house, Sales and Service Office in Guwahati/Shillong. Undertaking with proof of address to be enclosed.

4. If required, Qualified Bidders shall arrange a demonstration of the equipment, preferably in the office of Managing Director, MMDSL Laitumkhrah, Shillong, Meghalaya. The Bidder shall demonstrate the Equipment at office of Managing Director, MMDSL on date fixed by the technical committee duly constituted by competent authority. Failure to arrange for a demonstration on the given date may lead to cancellation of the bid. Cost of organizing such demonstration shall be borne by the bidder.

5. Tenders should be quoted only by the actual manufacturer/OEM or their authorized distributor/Channel Partner. The bidder is responsible for the supply of stores. If the Principal Manufacturer withdraws rights of distribution from the bidder during validity period of rate contract, Managing Director, MMDSL Meghalaya has right to cancel the eligibility of the bidder and accept the candidature of new coming authorized distributor.

6. The model of the equipment offered should not be obsolete /out of production for next 5 years.

7. Warranty period (Onsite Warranty including Spare Parts & Labour etc.)

8. Bidder and Manufacturer should give an undertaking stating that "The equipment being offered is the latest model as per the specifications and the spares for the equipment will be available for a period of at least 5 years after the warranty period.

9. Guarantee/warranty to the effect that before going out of production of spares parts, the manufacturers and/or Bidders will give adequate advance notice to the purchaser of the equipment so that the later may undertake to procure the balance of the life time requirements of spare parts. 10. The supplier warrants comprehensively for Onsite Warranty including Spare Parts &Labour etc. that the Equipment/Stores supplied under the contract is new, unused and incorporate all recent improvements in design and materials unless prescribed otherwise by the purchaser in the contract. The supplier further warrants that tie Equipment/stores supplied under



the contract shall have no defect arising from design, materials (except when the design adopted and / or the material used are as per the Purchaser's/Consignee's specifications) or workmanship or from any act or omission of the supplier that may develop under normal use of the supplied Equipment under the conditions prevailing in India

11. No conditional warranty like mishandling, manufacturing defects etc. will be acceptable

12. Comprehensive Warranty should be inclusive of all accessories and Turnkey work.

13. Replacement and repair will be under taken for the defective Equipment/Stores

14. Proper marking has to be made for all spares for identification like printing of installation and repair dates.

15. The firm will be required to warranty/guarantee that during the warranty period as well as during the service contract period, the equipment including the accessories will be maintained in good working condition for a period of 347 days out of a period of 365 days (i,e. 95% uptime).

16. Undertaking from the manufacturer is required to assure that the items manufactured are complied with the specification mentioned in the tender.

17. Upon receipt of such notice, the supplier shall, within 48 hours on a 24 X 7 X 365 basis respond to take action to repair or replace the defective Equipment/Stores or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/Equipment/stores after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/Equipment/stores thereafter. The penalty clause for non-replacement will be applicable as per tender conditions mentioned above or as decided by the Managing Director, MMDSL.

18. The Bidder hereby declares that the goods/equipment/stores/articles supplied to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications and the particulars contained/mentioned in the clauses here of and the Bidder hereby guarantee/ warranty that the said goods /equipment / stores/ articles conform to the description and quality aforesaid. The purchaser will be entitled to reject the said goods/equipment/stores/articles or such portion thereof as may be discovered not to conform to the said description and quality as follows:-

a. Bidder should state categorically whether they have fully trained technical staff for installation/commissioning of the equipment and efficient after sales services.

b. It is specifically required that the Bidder will supply all the operating and service manuals along with blue-prints and drawings including circuit diagram of the equipment supplied as well as its components

c. If the supplier, having been notified, fails to respond to take action to replace the defect(s) within 48 hours on a 24 X 7X 365 basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier

d. During Warranty period, the supplier is required to visit at consignee's site at least once in 3 months commencing from the date of the installation for preventive maintenance of the Equipment/Stores.

19. Onsite GUARANTEE/WARRANTY inclusive of all Spares and Labour: - The bidder will give an onsite guarantee/ warranty for trouble free functions and maintenance of the equipments



including spares and labour from the date of installation, commissioning and acceptance of the equipments.

20. Bidders are required to quote strictly as per specification of the equipment. Deviation to specification must be brought out clearly giving deviation statement in Annexure-VI.

21. The rates quoted by the successful bidder may be used for procurement of individual items in other hospital/institution across the state as and when required.

22. Additional features (in case of equipment), if any, should be listed separately in the offer.

23. The Firm should confirm that the equipment is brand New, is of latest technology and have facility for up gradation, if necessary

24. The minor nature in works like minor Electrical/Civil Works, if required for Equipment installation, also, the earthing required for the installation will carried out and borne by the Successful bidder, and for this purpose no extra payment, what so ever will not paid by Managing Director, MMDSL Meghalaya to any bidder.

25. All works shall have to be carried out as per specification conforming to the latest relevant IS Codes/BIS and Specifications of Building work of M.P.W.D.

26.Joint Ventures (JV) shall not be permitted.

Note: All bidders should quote equipment/items with following approved standards/requirement:-

a) All equipment should be as per the approved quality standard.

b) Manufacturer and Suppliers should have ISO, for quality standards

c) Bidder should preferably have Experience of Earthing Works and Integrating with UPS/Stabilizer or DG Sets or Inverter, Completion/Installation Report to be enclosed, without supporting documents tender may be summarily rejected.

d) Bidder Should have at least One Electrical and One Biomedical Engineer or undertaking that the required engineer will be hired in Khasi/Jaintia Hills Region and Garo Hills Region or in other region as necessary.

e) Quality Certificates as per product specification is to be provided.

f) Electrical safety conforms to standards for electrical safety.

g) All Literature (Log Book Maintenance Record/Troubleshooting/Operation Manuals etc.) supplied with each of equipment by Principal Manufacturer should be in Original

h) All consumables required for installation and standardization of equipment should be supplied free of cost with Equipment.

i) The prospective Bidder Shall have in their full-time engagement experienced technical personnel, the minimum being one Diploma/Degree holder Electrical Engineer

j) All required Training to the associated concerned staff at Client should be organized by the Bidder on his cost.

k) As stated in the detailed specification of individual items in Appendix I.

#### D. OPENING OF TENDER

#### 1. Bids will be open in two stages.



- 1.1 Sealed Cover A: Technical Bid
- 1.2 Sealed Cover B: Financial/Price Bid

2. At the time of opening only first cover (Sealed Cover A) containing the Technical bid shall be opened at the first stage and the second cover (Sealed cover B) containing financial bid shall be opened after qualifying the Technical bid. The date, time and venue for second stage opening will be intimated separately by the Tender Inviting Authority (TIA) only to selected/qualified bidders

3. The tender document in Sealed Cover A will be opened by the Managing Director, MMDSL Meghalaya, Shillong or such officer as may be authorized on his behalf in the office of the Managing Director MMDSL Meghalaya, Shillong as mentioned in the SNIT in the presence of the Bidder or their authorized representative as may be present. In case the above date is declared as holiday, the tenders will be opened on the following working days at the same time as stated above.

4. O/o Managing Director, MMDSL Meghalaya, Shillong reserves the right to open or not to open the priced Bid in Sealed Cover B of any reason (s) thereof.

- 5. Venue of Tender Opening:
- 5.1 O/o Managing Director, MMDSL Meghalaya, Shillong
- 6. The validity of the tender shall remain valid for 90 Days from the date of opening of the tender.

#### E. GENERAL GUIDELINES:

1. EMD Amount:

Bidder needs to deposit the EMD Amount in the form of DD/FDR/Bank Guarantee in favor of "Managing Director, MMDSL", Payable at Shillong, Meghalaya and a copy of EMD in Sealed envelope should be submitted along with pre-qualification/technical documents in the Technical Envelope.

1.1 The EMD shall be returned back to unsuccessful bidders within a period of eight (8) weeks from the date of execution of the agreement subject to the receipt of a written application addressed to the "Managing Director, MMDSL, Meghalaya. The return of EMD shall not carry any interest Component.

1.2 The EMD / Security Deposit shall liable to be forfeited in the following circumstance when the,

a) Tender is rejected due to failure to furnish the requisite documents in the proper format or giving any misleading statement or submission of false affidavit or fabricated does.

b) Party fails to sign the agreement for entering into contract in case the offer is accepted, due to any reason whatsoever.

c) Party fails to supply the goods/items as per the orders/ Rate Contract (R.C) placed by Managing Director, MMDSL, Meghalaya. Within the delivery period so stipulated.

d) Party fails to replace correct the supplied materials pre-printed stationers declared to be wrong/ different from specification and RC holder/ successful bidder have to refund the cost of such goods.

2. Instructions:



2.1 Please mention clearly on each sealed cover the annexure, meant for.

2.2 The main cover should be addressed to the O/O Managing Director, MMDSL, Red Hill,

Upper New Colony Health Complex, Laitumkhrah, Shillong – 3, Meghalaya.

2.3 The Bid should be dropped in the box provided for this purpose in the office of Managing Director, MMDSL, Shillong.

2.4 All documents submitted should be properly page numbered. Signed and should have appropriate and relevant contents.

2.5 Index sheet of each document should be submitted for ease and fast documentations verifications.

2.6 Bid documents that do not provide complete information and/or that are submitted after the above specified date or time shall be rejected

2.7 Bidder should quote their prices in the schedule format supplied in this tender (Annexure B) form giving the breakup of prices. Tender received in any other form will not be entertained.

#### 3. SECURITY DEPOSIT:

3.1 The Successful Bidders EMD will be retained as security deposit until the completion of the work/contract. The security deposit may be refunded on a receipt of written application addressed to The Managing Director, MMDSL, Meghalaya.

4. Prices:

4.1 The price offered in the tender should be as per the structure requested in the Tender document Annexure-B

4.2 All Quotes shall be in Indian Rupees and duly attested in case of any corrections. All freight costs &Transit insurance are to be borne by the bidder.

4.3 In case of imports, all duties and any other costs (foreseen or unforeseen) have to be borne by the bidder and to be clearly indicated in the quote.

5. Evaluation of Bids:

5.1 Technical evaluation of the items tendered will be done by a Technical Committee constituted by the Managing Director, MMDSL Meghalaya

5.2 Specifications for each of the items will be as detailed in the respective Annexures

5.3 Tenders submitted with technical and commercial bid will alone be considered for evaluation.

5.4 The commercial bids of Bidder who are successful in Technical Evaluation only would be considered.

5.5 The decision of the Committee formed by Purchaser would be final.

5.6 The rates quoted in this tender can be used for any future works of similar nature and can be awarded to the successful bidder as the case may be.

6. Quality Standards:

6.1 The Bidder/Manufacturers are to meet the approved Quality Standards or any other reputed standard by the Country of Origin. The evaluation would be done by the technical committee at the time of technical evaluation

6.2 During period of the contract, Bidder shall confirm to the approved quality standards



wherever applicable and would be given priority over others.

6.3 Bidder should supply equipment/goods which comply with the approved quality standard failing which payment of the same will not be made.

7. Sample Evaluations:

7.1 Samples whenever required, for valuation shall be provided by the Bidder at free of Cost.

7.2 The product should fulfill technical specification as per the approval quality standard or any other reputed standard by the Country of Origin.

7.3 In case bidder quoted more than one item for a particular item, during Technical round the Tender committee will select one item only according to quality satisfaction & the price bid of the selected item only shall be taken into account.

7.4 The Tender committee has the right to reject any sample in case the sample quality is found unsatisfactory and bidder has no right for any objection.

8. Quantity Division:

8.1 Each delivery schedule of requirement incorporate in the tender enquiry document will be ordered from the responsive successful bidder. However, it is the purchaser's decision to assess the capacity of the successful bidder to support the requirement.

9. Authority for signing Tender Documents:

9.1 A person signing the Tender Form or any document, forming pair of the contract on behalf of the Bidder, shall carry the authorization letter stating his/her authority to sign such documents from the respective organization.

9.2 Any Agent who is participating on behalf of a manufacturer shall have the Valid authorization Letter from the manufacturer to sell the goods in the area where the tender is meant for, without which the bid will not be considered as valid

10. Responsibility for Performance of Contract

10.1 The Bidder shall be entirely responsible for the performance of the contract in all respects in accordance with the terms and conditions as specified in the Contract. The Bidder shall not sublet, subcontract, transfer or assign the contract.

11. Quality Inspection:

11.1 For every unit supplied by the Bidder, the conformance to the Specifications mentioned in the Tender shall be established by the Bidder.

11.2 Bidder represents and warrants that it shall fully comply with all written quality assurance requirements or instructions of the Managing Director, MMDSL, Meghalaya, and as amended from time to time at the sole discretion of the Managing Director, MMDSL, Meghalaya. Bidder further represents and warrants that the Product supplied by the Bidder in strict compliance with all applicable central, state and local laws.

11.3 The Bidder shall maintain the highest standard of quality in the Product. Bidder shall follow and abide by all directions, requests, suggestions or instructions of Managing Director, MMDSL, Meghalaya regarding the quality standards required by Managing Director, MMDSL,





Meghalaya in connection with the manner of Packaging, storage and delivery of the Product. 11.4 The Bidder shall facilitate in-process and/or Pre-delivery inspection by the Representatives of the Purchaser, as and when, the same is required by the Purchaser

11.5 Notification by Bidder-In case of inspection at the Bidder's premises, notice in writing shall be sent by the Bidder, sufficiently in advance, to the Purchaser when the items to be supplied, are ready for inspection.

11.6 Rejections -At delivery, Managing Director, MMDSL, Meghalaya in its sole discretion may reject any Product produced or manufactured by Bidder for any reason, including Non-compliance with standard quality or any other reputed standard, but not limited to defects, or failure to meet approved quality standards, etc.

11.7 Removal of Rejections - Any supplies inspected and rejected at the Purchaser's premises must be removed by the Bidder, within7days from date of receipt of intimation of rejection of supplies in case of indigenous Bidder &28 days in case of foreign Bidder. If the rejected goods have already been paid for (partly or fully), the Bidder shall before removal of rejected goods, either deliver correct replacement goods at Purchaser's premises completely free of cost (including cost of goods, freight, taxes, duties etc.) or refund the payment received as well as make full compensation for freight taxes, duties etc. Such rejected items shall lie at Bidder's risk from the time of such rejections and if not removed within the above time limit. The Purchaser shall have the right to dispose off the said rejected materials as he may deem fit without any financial obligation to the Bidder.

11.8 If found that the Successful Bidder is incompetent to complete the works as requested, in such a situation, the proposal may be reviewed for award of the contract to the next qualifying bidder or go for a fresh bid depending on the circumstance. No form of compensation shall be payable in any form whatsoever to the forfeited firm. In case it is decided to go for the next qualifying bidder, negotiation maybe considered to bring down their price nearer to the originally Evaluated or Lowest bidder

12. Bidders Responsibility:

12.1 Under any circumstances, no Bidder shall supply the goods, in which recycled materials are used *I*used-disposables to Managing Director, MMDSL, Meghalaya. If Managing Director, MMDSL, Meghalaya finds any such instance, it will lead to cancellation of Purchase Order and subsequent severe punitive (legal and financial) actions by Managing Director, MMDSL, Meghalaya. However, all the consequential costs are to be borne by the Bidder to Managing Director, MMDSL, Meghalaya.

12.2 The Bidder is responsible for the delivery of the goods in satisfactory condition and without any loss or damage at the final destination and until the same is actually received by the Purchaser at its works or other place of final destination. For this purpose, goods carried by the roadway or other carrier shall be deemed to be carried at the risk of the Bidder. If on inspection at final destination the Purchaser discovers any discrepancy, the Purchaser will be entitled (not-with-standing that the property of goods shall have passed on to the company) to refuse acceptance of the goods altogether and claim damages and/or cancel the contract and buy its requirement in the open market at the risk and cost of the Bidder, reserving always to itself, the right of forfeiture of any amount found due



and payable or the deposit, if any, placed by the Bidder for the due fulfillment of the contract as also to recover any amount, if already paid.

13. Responsibility for proper packing, wherever required:

13.1 The Bidder shall be responsible for the items being sufficient and properly packed, for transport by rail/road/sea/air/ or any combination of the above, so as to ensure their being free from loss or damage on arrival at the destination.

13.2 In case if a bidder has got successful or more than one item, the supply shall be packed in lot, as per the instructions of Managing Director, MMDSL, Meghalaya.

13.3 Marking of Packages, packing: Each package delivered under the contract shall bear the following: -

13.3.1 Name of the Bidder

13.3.2PO Number

13.3.3Consignee's name and address

13.3.4 Description and quantity of contents

13.3.5Gross weight, Net weight,

13.3.6Distinctive number or mark which is also to be shown, for the purpose of Identification, on the Bidder's packing list.

13.3.7Govt. Supply, MMDSL, Govt. Of Meghalaya

14. Delivery:

14.1 Timely delivery is the essence of the contract & must be completed as per the dates specified therein.

14.2 The Bidder shall deliver the items in strict accordance with the delivery terms indicated on the Purchase Order issued to the successful bidder.

14.3 Notification of delivery or dispatch in regard to each and every consignment shall be made by the Bidder to the authorities named in the Contract.

15. Risk Purchase:

15.1 If the Bidder fails to deliver the items either in full or in part, within the prescribed delivery period, the Purchaser shall be entitled at his option to take alternate procurement action, at the risk &cost of the Bidder for the unsupplied portion of the goods/items without cancelling the contract in respect of the items not yet due for delivery, or to cancel the contract based on progress of work, including items not due for delivery, and, if thought fit/necessary, to purchase the items at the risk and cost of the Bidder. The price differential in the case of higher cost to Purchaser, if any, shall have to be borne by the defaulting Bidder. Moreover, the defaulting Bidder shall have no claim over the quantity, which they failed to supply.

16. Addendum & Corrigendum:

16.1 At any time prior to the date of submission of the Bids, the Tender Inviting Authority may, for any reason whatsoever, whether on his own initiative or in response to a clarification requested by prospective bidders, modify the Tender Documents by an act of amendment there after referred to as an Addendum for Addition & Corrigendum for Correction. All prospective bidders who have received the bid documents will be notified of the Addendum/ Corrigendum and that will be binding on them. In order to provide reasonable time to take the Amendment into account, the



Tender Inviting Authority may at its discretion extend the date and time for submissions of Bids. The bidders should check for such amendments or Corrigendum on the MMDSL website. No separate intimation will be issued to them.

17. Ethics:

Any attempt by a Bidder to obtain confidential information. Enter into unlawful agreements with competitors or influence the committee or the Contracting Authority during the process of examining clarifying evaluating and comparing tenders shall make the tender submitted by that Bidder liable for rejection.

18. Quantity of Delivered Items:

18.1 If the quantity received by the Target Delivery date is less than the P.O Scheduled quantity, then the physical quantity received will be the quantity certified by the Purchaser.

18.2 If the quantity received is more than the P.O quantity, the excess quantity shall not be paid for, by the Purchaser.

18.3 In case of any supply quantity with an upper or lower tolerance of over 5%, Managing Director, MMDSL, Meghalaya will have the right to accept or reject the material immediately

19. Taxes, Duties and Levies:

19.1 Bidders must clearly mention their GST Registration in their offers and invoices.

19.2 GST shall be clearly mentioned in the offer indicating the applicable rates.

19.3 Incase if there is a decrease in the Statutory Taxes/Duties/Levies, the same has to be passed to The Purchaser

20. Guarantee:

20.1 The Bidder must take the entire responsibility to supply the Quality-oriented products to Managing Director- MMDSL, Meghalaya. In case of distributors, the responsibility lies with the distributor to ensure the supply of right quality materials to Managing Director-MMDSL, Meghalaya.

21. Indemnity:

21.1 The Bidder shall at all times indemnity the Purchaser against all claims which may be made in respect of the items, for infringement of any right protected by Patent, registration of design or Trade Mark and shall take of accidents or damage which may occur or failure of the supply arising. The Bidder shall be entirely responsible for the sufficiency of all the means used by them for the fulfillment of the contract. Bidder shall agree to indemnify, defend and hold Managing Director, MMDSL, Meghalaya and its Officers, Directors, Employees, its parent and assigns harmless from and against any and all liability, losses, damages, claims, liens, expenses or causes of action including, but not limited to reasonable legal fees and expenses that may be incurred by Managing Director, MMDSL, Meghalaya, arising directly or indirectly out of, or in connection with, Bidder's violation or breach of any of the terms of this Agreement or any or commission to act by Bidder in violation of the Agreement. Managing Director, MMDSL,



Meghalaya Shall provide the Bidder with prompt written notice of any claim for which indemnification is sought and shall have the right to participate in the defense of any such claim.

22. Compliance of the Laws of the land:

22.1 The Bidder shall comply with all state and local laws and regulations shall obtain all necessary licensing for the operation of its business and shall further comply with all quality control standards promulgated by Managing Director, MMDSL, Meghalaya from time to time.
23. Documentation requirement:

23.1 A Bidder has to submit the following documents along with the shipment.

23.1.1 Invoice in original along with two additional copies, both duly signed and stamped by the Bidder.

23.1.2 Original packing list.

23.1.3 A copy of Purchase order raised by Managing Director, Nation Health Mission, Meghalaya

#### 24. Product Withdrawal:

24.1 If it is deemed necessary at any time by either Managing Director, MMDSL, Meghalaya or Bidder or any local state, or central government agency or other authority to recall or withdraws the product produced by Bidder/ Manufacture and being Supplied to Managing Director, MMDSL, Meghalaya, either as a result of failure of the Product or Bidder to strictly comply with Managing Director , MMDSL, Meghalaya quality standard or any government health rule or regulation, or shall fail to comply with any other government authority or agency having jurisdiction, Bidder shall bear all cost and expenses incurred by it and/or in complying with the recall or withdrawal procedures, unless such recall or withdrawal is solely the result of the negligence or misuse by Managing Director , MMDSL, Meghalaya.

24.2 If Bidder fails or refuses to promptly comply with the recall or withdrawal of the product upon request by the purchase, Managing Director, MMDSL, Meghalaya shall take such action as it deems necessary to recall or withdraw the product and Bidder shall immediately reimburse for the costs and expenses incurred.

24.3 If the Product Supplied is not as per the specification on analysis of the samples by appropriate approved authority, then the rejection and available quantities have to be lifted back by the Bidder. All cost and consequences of such rejected quantities shall be borne by the Bidder.

25. Product Allocation and stocking:

25.1 In the even there is an emergency shortage of the product, as announced by Bidder or its designated representatives, Bidder shall stand ready to stock adequate quantities of the Product so that scheduled Bidder to Managing Director, Nation Health Mission, Meghalaya should not suffer for the full contract period. In an event of Bidder failing to supply the materials in order quantities and as per time schedules, Managing Director, MMDSL, Meghalaya, reserves the right to produce the product of same of Bidder quality at same or higher price from an alternate supply source and any difference in cost of procurement shall be debited to the Bidder.

26. Trademarks:



26.1 The Bidder shall nor, without prior written consent of Managing Director, MMDSL, Meghalaya use the trademarks or service marks or sales marks of Managing Director, MMDSL, Meghalaya in any manner whatsoever, unless, and then only to the extent, such use is authorized by Managing Director, MMDSL, Meghalaya in writing and then only in accordance with Managing Director, MMDSL, Meghalaya directions or specification.

27. Infringements:

27.1 The Bidder agrees to fully cooperate with Managing Director, MMDSL, Meghalaya in the prosecution of any such suit against a third party and shall execute all papers, testify on all matters, and otherwise cooperate in every way necessary and desirable for the prosecution of any such lawsuit.

28. Governing Law; Dispute Resolution:

28.1 This Agreement shall be governed by, and construed in accordance with, the laws of the India; without regard to conflict of law principles, and under the jurisdiction of Meghalaya and language shall be English

#### 29. Notice:

29.1 Any notice required co begiven pursuant to this Agreement shall be in writing and delivered personally or by a nationally recognized overnight courier service, or mailed by certified or registered mail, return receipt requested, to the other party at its address asset for that the top of this Agreement.

29.2 All such notices shall be effective upon delivery or upon refusal to accept delivery.

29.3 Either party may change the address to which notice is to be sent by written notice to the other in accordance with the provisions of this paragraph.

30. Miscellaneous:

30.1 If any term, clause or provision hereof is held invalid or unenforceable by a court of competent jurisdiction, such invalid or unenforceability shall not affect the validity or operation of any other term, clause or provision, and such invalid or unenforceable term, clause provision shall be deemed to be severed from the Agreement.

30.2 This Agreement constitutes the entire understanding of the parties, and revokes and supersedes all prior agreements between the parties, and is intended as a final expression of their agreement. It shall not be modified or amended except in writing signed by the parties here to and specifically referring to this Agreement.

30.3 Bidders or employees of bidder cannot claim or construed as employees of Managing Director, MMDSL, Meghalaya.

#### 31. Force Majeure:

If at any time during the validity of the Contract, the performance in whole or in part by either party of any obligation under this Contract shall be prevented or delayed by reasons of War, Hostility, Acts of Public Enemy, Civil Commotion(s), Sabotage, Fire(s), Flood(s), Explosion(s), Epidemic, Quarantine Restrictions, Acts of State or Acts of God, hereinafter referred If at any time during the validity of the Contract the performance in whole or in part



by either party of any obligation under this Contract shall be prevented or delayed by reasons of War, Hostility, Acts of Public Enemy, Civil Commotion(s), Sabotage, Fire(s), Flood(s), Explosion(s), Epidemic, Quarantine Restrictions, Acts of State or Acts of God, hereinafter referred to as eventualities, then the Contract period will get extended for the period of Force Majeure, provided Notice of the happenings of any such eventualities is given, supported by a certificate of appropriate authority or Chamber of Commerce by either party co the other within 15 days from the date of occurrence thereof. Neither party shall by reason of such eventualities be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance. Should one or both parties be prevented from fulfilling their contractual obligations by state of Force Majeure lasting continuously for a period of at least three months, the parties shall consult each other regarding further continuation of the Contract.

#### 32. Dispute Redressal Committee:

All disputes can be addressed by amicable settlement by a committee constituted by Managing Director, MMDSL, Meghalaya.

#### 33. Declaration by the Bidder:

The Bidder shall be required to declare whether the proprietor or any partner of the firm or Director of their company as the case may be, has any relation to any employee working with the Purchaser and if so, give the name of the employee and the relationship.

#### 34. Waiver:

Failure to operate or 10 enforce any condition under this Contract shall not operate as a waiver of the condition itself or any subsequent breach thereof.

35. Payment Terms: Payment will be made on successfully execution of delivery as per purchase order on submission of bill(s) duly supported by delivery challan, installation reports certified by the concerned officer with details of payment to be made.

#### 36. FALL CLAUSE:

The prices quoted for the material supplied under this tender by the Bidder shall in no event exceed the lowest price at which the Bidder sells or offers to sell similar material in similar volume of identical description to any person(s)/organization(s) including the Purchaser or any other Managing Director, MMDSL, office located at any other place in India. If at any lime during the said period, the Bidder reduces the sale price, sells or offers to sell such stores to any person(s)/organization(s) including the Purchaser or any Statutory Undertaking of the Central or a State Government, as the case may be, at a price lower than the price chargeable under this contract, he shall forthwith notify such reduction or sale or offer to sale to the Purchaser and the price payable under the contract for the material supplied after the date of coming into force of such reduction or sale or offer of sale stand correspondingly reduced.



#### 37. Blacklisted:

An Affidavit on a Non Judicial Stamp Paper of Rs. 10/-, attested by a Notary Public (In Original) that there is no vigilance / CBI Case or arbitration cases pending with the Government of Meghalaya against the Form/Bidder that the Proprietor/Director/Members of the Board of Directors of the Bidder and the Principal Manufacturer on whose behalf they have quoted has never been blacklisted by any Institution (Government or Public).

Managing Director MMDSL Shillong, Meghalaya

#### **TECHNICAL SPECIFICATION**

#### Appendix – I

1. Uninterruptible Power Supply (UPS) System – 3 kVA to 10kVA

Sr No	Parameters	3 kVA	6kVA	10 kVA
1	Rating 03 kVA		06 kVA	10 kVA
2	kVA	03kVA	06 kVA	10 kVA
3	kW	2.4 - 2.7 kW	4.8 - 5.4  kW	8-9 kW
5	Operating Temperature Range	0 to 40 Degree @ 100% Load @ 50 Degree with 50% Load	0 to 40 Degree @ 100% Load @ 50 Degree with 50% Load	0 to 40 Degree @ 100% Load @ 50 Degree with 50% Load
6	Storage Temperature	-15°C~60°C	-15°C~60°C	-15°C~60°C
7	Relative Humidity	0-95% No condensates	0-95% No condensates	0-95% No condensates
8	Altitude	>1000m	>1000m	>1000m
9	Acoustic Noise	40 dBA @ 1 Meter	55 dBA	55 dBA
10	Cooling	Forced air cooling by the internal fans	Forced air cooling by the internal fans	Forced air cooling by the internal fans
12	Input Socket	IEC C13	IEC C13	IEC C13
13	Output Socket	IEC C14	IEC C14	IEC C14
14	No of output sockets	4 No's + Terminal Block	4 No's + Terminal Block	4 No's + Terminal Block
16	Rated Input Voltage	208/220/230/240 Vac	208/220/230/240 Vac	208/220/230/240 Vac
17	Maximum working input	160 to 300 Vac @ 100% Load	176V~276V Resistive load>100%	176V~276V Resistive load>100%
18	voltage range	100 to 300 Vac @ 50% Load	110V~276V Resistive load <50%	110V~276V Resistive load <50%
19	Input Power Factor	0.99	0.99	0.99





20	Input THDi%	5%	<3%	<3%
21	Generator Set	Should be 1.5 x	Should be 1.5 x UPS	Should be 1.5 x UPS
		UPS Capacity	Capacity	Capacity
23	Rated kVA	03kVA	06 kVA	10 kVA
24	Rated kW	2.4 kW	4.8 kW	8 kW
25	Load type	Resistive load/ lagging load/ non- linear load/ transformer load/ lighting load	Resistive load/ lagging load/ non-linear load/ transformer load/ lighting load	Resistive load/ lagging load/ non-linear load/ transformer load/ lighting load
26	Load power factor range	0.8~1 lagging	0.8~1 lagging	0.8~1 lagging
27	Load Crest Ratio	3:1	3:1	3:1
28	Output wave type	Pure sine wave	Pure sine wave	Pure sine wave
29	Online Efficiency	>91%	95%	95%
31	Rated Battery Voltage	72 Vdc	192 Vdc (192-240 Vdc Adjustable)	192 Vdc (192-240 Vdc Adjustable)
32	Battery Type	VRLA (Valve Regulated Lead Acid Battery), 12VDC	VRLA (Valve Regulated Lead Acid Battery), 12VDC	VRLA (Valve Regulated Lead Acid Battery), 12VDC
33	Battery Capacity and Number	Inbuilt 9 AH* 6 No's	Inbuilt 7AH* 16 No's	Inbuilt 9AH* 16 No's
34	Maximum charging current	1.6 – 3.1Amps	3.6 - 6.3 Amps	5.2 – 10.4 Amps
36	ECO Mode	Should be Available	Should be Available	Should be Available
37	Communication (Independent SCI)	Should be Available	Should be Available	Should be Available
38		Should be Available	Should be Available	Should be Available
39	Intelligent Card	Should be Available	Should be Available	Should be Available
40	slot (Independent	Should be Available	Should be Available	Should be Available
41	SCI)	Should be Available	Should be Available	Should be Available
42		Should be Available	Should be Available	Should be Available
43	OVCD	Should be Available	Should be Available	Should be Available
44	EPO Function	Should be Available	Should be Available	Should be Available





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45	Intelligent Fans Speed control	Should be Available	Should be Available	Should be Available
46	Auto restart function	Should be Available	Should be Available	Should be Available
47	Cold start	Should be Available	Should be Available	Should be Available

## 2. Uninterruptible Power Supply (UPS) System – 15 kVA & 20kVA

Description of Items
Supply Installation Testing Commissioning of 15KVA/KW & 20KVA/KW Rack Mountable UPS with VRLA batteries in Parallel Configuration(2X 15KVA/KW & 2 x 20KVA/KW on each Path) for power backup.
Each True Online Double Conversion UPS using PWM IGBT technology 20 KVA UPS shall comprise of the following:
(a) UPS should have online efficiency greater than 96% from 50% to 75% load range and 100% Power f actor rated i.e KVA = KW @ 40 degrees C
(b) IGBT Rectifier input for achieving Input Current Harmonics THDi<3% @ 100% load and Input power factor of 0.99 or better @ 100% load.
(c) UPS should be configurable to single phase input single phase output, Three phase input single phase output, Three phase input Three phase output
(d) UPS should Colored touch LCD with gravity sensor
(e) UPS Should be rack mount in 3U rack height and should have feature of paralleling up to 3 units
(f) UPS shall have flexible battery design and shall be operational at 32-40 Batteries. UPS to have a feature of Common battery bank
(g) RS 485 port for BMS connectivity + SNMP Connectivity both are required and should be operational from day one
(h) UPS OEM shall provide a monitoring software which should be able to command certain protective actions such a migration of virtual machines, controlled shutdown, or disaster recovery relation actions. The software shall be compatible with third party information technologies solutions connector of VMWARE & CITRIX., Microsoft, Cisco, Nutanix, Open stack etc
(i) This requirement is of very critical, the SNMP card provided should have a Cybersecurity certification in lined with UL 2900 standard. Test Certificate to be shared along with the bid for verification
Supply of 12V, VRLA Batteries and Racks
Vendor to provide 2hr backup with top covered rack and required DC Cable from UPS to Battery ,considering 10 meters
Warranty
Warranty should be 2 years on UPS and 2 years on batteries
2 X 20KW UPS as described above





RATINGS	30kVA
Configuration	Standalone Configuration
Model	To be provided by OEM
kVA/kW Rating (all modes)	30/24
UPS Topology	Double Conversion, IGBT Converters (IGBT Based Rectifier & IGBT based Inverter)
External paralleling	Parallel up to four UPSs to increase availability or add capacity. Provision of Parallel Redundant UPS operating in Wireless Parallel redundant configuration (i.e. UPS to continue working in parallel even in the case parallel Cable failure.
Performance classification	VFI-SS-111
In-Built Switch for protection	Maintenance Bypass Switch Rectifier Input Switch, Bypass Input Switch, Output Isolation Switch,
Capacity Test of UPS	The UPS system shall be capable of utilizing the load testing function, including internally adjustable load testing at the customer site, without the need for a load bank. Testing could be carried out during the annual maintenance shutdown to test the UPS system or recovery after UPS servicing without incurring the cost of renting the load bank, electrical works and engineering manhour, as well as, time saving.
SNMP/Network Card	the SNMP/Network Card shall be certified for cybersecurity standards of UL & IEC 62443-4-2:2019"."
UPS Dimensions: (H x W x D) (mm)	As per OEM design
Degree of protection	IP20, with front door mounted washable dust filter
Cabinet colour	Black, RAL 9005
Cable entry	Cable access shall be through the bottom or rear of the UPS cabinet
Weight (kg) without batteries	To be provided by OEM
Ambient service temperature	UPS: 0 to +40 Degree C Battery (installed separately): +5 to +25 Degree C without reducing battery life
Maximum service altitude	1000m above sea level. Maximum 2000m with 1% de-rating per each additional 100m above 1000m
Relative humidity	5 to 95%, no condensation allowed
Acoustic noise at 1m (ISO7779)	≤65 dBA at 1m typical
Electromagnetic Compatibility	Immunity and emission to IEC/EN 62040-2
Display	Graphical LCD with blue backlight, 4x LEDs for notice and alarm





Standard Communication Ports	Communication Ports - (1) RS-232, (1) USB, (1) EPO Communication Slots - (2) Mini-slot communication bays
Rated input voltage and voltage tolerance	230/400Vac nominal (220/380, 240/415 Selectable) 190/330– 276/478V (-15%, +20%) at 100% load, Input Voltage Range -15%, +20% from nominal (400V) at 100% load
Input Frequency	40 to 72 Hz auto-sensing
Input current distortion	<5% THDi (Linear load condition at rated input current)
Input power factor	<5% THDi (Linear load condition at rated input current)
Inrush current	<5 x nominal rating
Number of input phases	3 phases + Neutral + PE (3 phase input)
Rated output voltage	230/400 Vac, three phase, (220/380, 240/415 selectable)
Voltage THD	<ul> <li>a. 2% Total Harmonic Distortion (THD) maximum phase to neutral into a maximum rated linear load (5% phase to phase)</li> <li>b. 5% THD maximum phase to neutral and phase to phase into a non-linear load</li> </ul>
Crest factor	3:1
Operating Frequency	50/60 Hz (40 to 72 Hz)
Total voltage distortion	<2% with linear load, <5% with non-linear load defined according to EN62040-3
Load power factor range	0.8 lagging to 0.9 leading without de-rating
Transfer to/from stored energy	No break
Rated output voltage	230/400 Vac, three phase, (220/380, 240/415 selectable)
Crest factor	3:1
Output Frequency Regulation:	50/60 Hz +/- 4Hz, +/-1 to +/- 4 Hz selectable, synchronised to mains, +/- 0.005 Hz free running (single module) or +/- 0.07 Hz (parallel system)
Current Overload Capability	a. 102-125% for 10 min b. 126-150% for 1 min c. >150% for 150 min
Efficiency	Up to 94% Double-conversion mode
Performance classification	VFD, transferring to VFI (Double Conversion mode) if limits are exceeded
Efficiency	≥98% at 100% linear load; ≥97% at 50% linear load
Transfer Time Mains Available	No break (0ms)
Transfer Time Mains Failure	2ms typical,< 4ms max
Acceptable voltage variation	±10% of nominal voltage
Acceptable output freq. variation	±4Hz





Backup time required       30 Min         Alternative backup power       Should be compatible with Lithium-ion batteries for future enhancement         1. Battery recharge: After recharging batteries to full capacity, the charger will enter the rest mode to increase the battery lifetime according the ABM cycle. Hence, continuous float charging of the battery shall not be required if the ABM feature is selected. The active battery charger states are constant-current (charge mode), constant-voltage (float mode) and no-charge (rest mode). The ABM feature is user (or service) selectable. If ABM is not utilised, the UPS operates as a conventional float charger.         Advanced Battery Management:       2. Battery Runtime Monitoring: UPS shall monitor batteries and provide status to end user of battery remaining capacity via front panel icon, remote communications, or both. Runtime calculations to be based on load demand and analysis of battery health.         3. Battery Health Monitoring: UPS shall periodically test and monitor battery health and provide warnings visually, audibly and/or remotely when battery capacity falls below 80% of original capacity. Battery testing may also be user initiated via front panel or serial communications.         Safety Access       Restricted access         Degree of protection       IP20 with standard washable dust filters protection against medium sized foreign matter (incl. finger)         a) IEC 62040-2-C3 (conducted and radiated) EN61000-4,-5, level 4 - 4 kV L-PE, 2kV L-L Electrostatic discharge (ESD): 8 kV air discharge, 4 kV contact discharge (IEC 61000-4-2, level 3) Electromagnetic field: IEC 61000-4-8 level 4.	High Alert mode	UPS will stay in double-conversion mode for one hour (user adjustable), after which the unit will automatically return to operate in HE mode
30 Min         Alternative backup power         technologies         Should be compatible with Lithium-ion batteries for future enhancement         1. Battery recharge: After recharging batteries to full capacity, the charger will enter the rest mode to increase the battery lifetime according the ABM cycle. Hence, continuous float charging of the battery shall not be required if the ABM feature is selected. The active battery charger states are constant-current (charge mode), constant-voltage (float mode) and no-charge (rest mode). The ABM feature is user (or service) selectable. If ABM is not utilised, the UPS operates as a conventional float charger.         Advanced Battery Management:       2. Battery Runtime Monitoring: UPS shall monitor batteries and provide status to end user of battery remaining capacity via front panel icon, remote communications, or both. Runtime calculations to be based on load demand and analysis of battery health.         3. Battery Health Monitoring: UPS shall periodically test and monitor battery health and provide warnings visually, audibly and/or remotely when battery capacity falls below 80% of original capacity. Battery testing may also be user initiated via front panel or serial communications.         Safety Access       Restricted access         Degree of protection       IP20 with standard washable dust filters protection against medium sized foreign matter (incl. finger)         Safety       a) IEC 62040-2-C3 (conducted and radiated) EN61000-4,-5, level 4 - 4 kV L-PE, 2kV L-L Electrostatic discharge (ESD): 8 kV air discharge, 4 kV contact discharge (IEC 61000-4-2, level 3) Electromagnetic field: IEC 61000-4-8 level 4.	Battery nominal voltage	432V (216 Cells) to 480V (240 Cells)
technologies       enhancement         1. Battery recharge: After recharging batteries to full capacity, the charger will enter the rest mode to increase the battery lifetime according the ABM cycle. Hence, continuous float charging of the battery shall not be required if the ABM feature is selected. The active battery charger states are constant-current (charge mode), constant-voltage (float mode) and no-charge (rest mode). The ABM feature is user (or service) selectable. If ABM is not utilised, the UPS operates as a conventional float charger.         Advanced Battery Management:       2. Battery Runtime Monitoring: UPS shall monitor batteries and provide status to end user of battery remaining capacity via front panel icon, remote communications, or both. Runtime calculations to be based on load demand and analysis of battery health.         3. Battery Health Monitoring: UPS shall periodically test and monitor battery testing may also be user initiated via front panel or serial communications.         Safety Access       Restricted access         Degree of protection       IP20 with standard washable dust filters protection against medium sized foreign matter (incl. finger)         Safety       a) IEC 62040 or EN 62040         b) EN 60950       Emission and Immunity:         EEC62040-2-C3 (conducted and radiated)         EN61000-4-5, level 4 – 4 kV L-PE, 2kV L-L Electrostatic discharge (IEC 61000-4-2, level 3) Electromagnetic field: IEC 61000-4-8 level 4.	Backup time required	30 Min
Advanced Battery Management:       charger will enter the rest mode to increase the battery lifetime according the ABM cycle. Hence, continuous float charging of the battery shall not be required if the ABM feature is selected. The active battery charger states are constant-current (charge mode), constant-voltage (float mode) and no-charge (rest mode). The ABM feature is user (or service) selectable. If ABM is not utilised, the UPS operates as a conventional float charger.         2. Battery Runtime Monitoring: UPS shall monitor batteries and provide status to end user of battery remaining capacity via front panel icon, remote communications, or both. Runtime calculations to be based on load demand and analysis of battery health.         3. Battery Health Monitoring: UPS shall periodically test and monitor battery health and provide warnings visually, audibly and/or remotely when battery capacity falls below 80% of original capacity. Battery testing may also be user initiated via front panel or serial communications.         Safety Access       Restricted access         Degree of protection       IP20 with standard washable dust filters protection against medium sized foreign matter (incl. finger)         Safety       a) IEC 62040 or EN 62040 b) EN 60950         Emission and Immunity:       IEC62040-2-C3 (conducted and radiated) EN61000-4,-5, level 4 – 4 kV L-PE, 2kV L-L Electrostatic discharge (ESD): 8 kV air discharge, 4 kV contact discharge (IEC 61000-4-2, level 3) Electromagnetic field: IEC 61000-4-8 level 4.	Alternative backup power technologies	enhancement
Degree of protection       IP20 with standard washable dust filters protection against medium sized foreign matter (incl. finger)         Safety       a) IEC 62040 or EN 62040 b) EN 60950         Emission and Immunity:       IEC62040-2-C3 (conducted and radiated) EN61000-4,-5, level 4 – 4 kV L-PE, 2kV L-L Electrostatic discharge (ESD): 8 kV air discharge, 4 kV contact discharge (IEC 61000-4-2, level 3) Electromagnetic field: IEC 61000-4-8 level 4.	Management:	<ul> <li>charger will enter the rest mode to increase the battery lifetime according the ABM cycle. Hence, continuous float charging of the battery shall not be required if the ABM feature is selected. The active battery charger states are constant-current (charge mode), constant-voltage (float mode) and no-charge (rest mode). The ABM feature is user (or service) selectable. If ABM is not utilised, the UPS operates as a conventional float charger.</li> <li>2. Battery Runtime Monitoring: UPS shall monitor batteries and provide status to end user of battery remaining capacity via front panel icon, remote communications, or both. Runtime calculations to be based on load demand and analysis of battery health.</li> <li>3. Battery Health Monitoring: UPS shall periodically test and monitor battery health and provide warnings visually, audibly and/or remotely when battery capacity falls below 80% of original capacity. Battery testing may also be user initiated via front panel or</li> </ul>
IP20 with standard washable dust filters         protection against medium sized foreign matter (incl. finger)         Safety         a) IEC 62040 or EN 62040         b) EN 60950         Emission and Immunity:         IEC62040-2-C3 (conducted and radiated)         EN61000-4,-5, level 4 – 4 kV L-PE, 2kV L-L Electrostatic         discharge (ESD): 8 kV air discharge, 4 kV contact discharge (IEC         61000-4-2, level 3) Electromagnetic field: IEC 61000-4-8 level 4.	Safety Access	Restricted access
Safety       a) IEC 62040 or EN 62040         b) EN 60950         Emission and Immunity:         IEC 62040-2-C3 (conducted and radiated)         EN61000-4,-5, level 4 – 4 kV L-PE, 2kV L-L Electrostatic         discharge (ESD): 8 kV air discharge, 4 kV contact discharge (IEC         61000-4-2, level 3) Electromagnetic field: IEC 61000-4-8 level 4.	Degree of protection	
Emission and Immunity: IEC62040-2-C3 (conducted and radiated) EN61000-4,-5, level 4 – 4 kV L-PE, 2kV L-L Electrostatic discharge (ESD): 8 kV air discharge, 4 kV contact discharge (IEC 61000-4-2, level 3) Electromagnetic field: IEC 61000-4-8 level 4.	Safety	a) IEC 62040 or EN 62040
Marking CE morts	Emission and Immunity:	IEC62040-2-C3 (conducted and radiated) EN61000-4,-5, level 4 – 4 kV L-PE, 2kV L-L Electrostatic discharge (ESD): 8 kV air discharge, 4 kV contact discharge (IEC
CE-mark	Marking	CE-mark

#### 4. Uninterruptible Power Supply (UPS) System – 40kVA

RATINGS	40kVA
Configuration	Standalone Configuration
Model	To be provided by OEM
kVA/kW Rating (all modes)	40/36
UPS Topology	Double Conversion, IGBT Converters (IGBT Based Rectifier & IGBT based Inverter)



External paralleling	Parallel up to four UPSs to increase availability or add capacity. Provision of Parallel Redundant UPS operating in Wireless Parallel redundant configuration(i.e. UPS to continue working in parallel even in the case parallel Cable failure.
Performance classification	VFI-SS-111
In-Built Switch for protection	Maintenance Bypass Switch Rectifier Input Switch, Bypass Input Switch, Output Isolation Switch,
Capacity Test of UPS	The UPS system shall be capable of utilizing the load testing function, including internally adjustable load testing at the customer site, without the need for a load bank. Testing could be carried out during the annual maintenance shutdown to test the UPS system or recovery after UPS servicing without incurring the cost of renting the load bank, electrical works and engineering manhour, as well as, time saving.
SNMP/Network Card	the SNMP/Network Card shall be certified for cybersecurity standards of UL & IEC 62443-4-2:2019"."
UPS Dimensions: (H x W x D) (mm)	As per OEM design
Degree of protection	IP20, with front door mounted washable dust filter
Cabinet colour	Black, RAL 9005
Cable entry	Cable access shall be through the bottom or rear of the UPS cabinet
Weight (kg) without batteries	To be provided by OEM
Ambient service temperature	UPS: 0 to +40 Degree C Battery (installed separately): +5 to +25 Degree C without reducing battery life
Maximum service altitude	1000m above sea level. Maximum 2000m with 1% de-rating per each additional 100m above 1000m
Relative humidity	5 to 95%, no condensation allowed
Acoustic noise at 1m (ISO7779)	≤65 dBA at 1m typical
Electromagnetic Compatibility	Immunity and emission to IEC/EN 62040-2
Display	Graphical LCD with blue backlight, 4x LEDs for notice and alarm
Standard Communication Ports	Communication Ports - (1) RS-232, (1) USB, (1) EPO Communication Slots - (2) Mini-slot communication bays
Rated input voltage and voltage tolerance	230/400Vac nominal (220/380, 240/415 Selectable) 190/330– 276/478V (-15%, +20%) at 100% load, Input Voltage Range -15%, +20% from nominal (400V) at 100% load
Input Frequency	40 to 72 Hz auto-sensing
· · ·	C





Input current distortion	<5% THDi (Linear load condition at rated input current)
Input power factor	<5% THDi (Linear load condition at rated input current)
Inrush current	<5 x nominal rating
Number of input phases	3 phases + Neutral + PE (3 phase input)
Rated output voltage	230/400 Vac, three phase, (220/380, 240/415 selectable)
Voltage THD	<ul> <li>a. 2% Total Harmonic Distortion (THD) maximum phase to neutral into a maximum rated linear load (5% phase to phase)</li> <li>b. 5% THD maximum phase to neutral and phase to phase into a non-linear load</li> </ul>
Crest factor	3:1
Operating Frequency	50/60 Hz (40 to 72 Hz)
Total voltage distortion	<2% with linear load, <5% with non-linear load defined according to EN62040-3
Load power factor range	0.7 lagging to 0.9 leading without de-rating
Transfer to/from stored energy	No break
Rated output voltage	230/400 Vac, three phase, (220/380, 240/415 selectable)
Crest factor	3:1
Output Frequency Regulation:	50/60 Hz +/- 4Hz, +/-1 to +/- 4 Hz selectable, synchronised to mains, +/- 0.005 Hz free running (single module) or +/- 0.07 Hz (parallel system)
Current Overload Capability	a. 102-125% for 10 min b. 126-150% for 1 min c. >150% for 150 ms
Efficiency	Up to 94% Double-conversion mode
Performance classification	VFD, transferring to VFI (Double Conversion mode) if limits are exceeded
Efficiency	≥98% at 100% linear load; ≥97% at 50% linear load
Transfer Time Mains Available	No break (0ms)
Transfer Time Mains Failure	2ms typical,< 4ms max
Acceptable voltage variation	$\pm 10\%$ of nominal voltage
Acceptable output freq. variation	±4Hz
High Alert mode	UPS will stay in double-conversion mode for one hour (user adjustable), after which the unit will automatically return to operate in HE mode
Battery nominal voltage	432V (216 Cells) to 480V (240 Cells)
Backup time required	30 Min
Alternative backup power technologies	Should be compatible with Lithium-ion batteries for future enhancement



Advanced Battery Management:	<ol> <li>Battery recharge: After recharging batteries to full capacity, the charger will enter the rest mode to increase the battery lifetime according the ABM cycle. Hence, continuous float charging of the battery shall not be required if the ABM feature is selected. The active battery charger states are constant-current (charge mode), constant-voltage (float mode) and no-charge (rest mode). The ABM feature is user (or service) selectable. If ABM is not utilised, the UPS operates as a conventional float charger.</li> <li>Battery Runtime Monitoring: UPS shall monitor batteries and provide status to end user of battery remaining capacity via front panel icon, remote communications, or both. Runtime calculations to be based on load demand and analysis of battery health.</li> <li>Battery Health Monitoring: UPS shall periodically test and monitor battery health and provide warnings visually, audibly and/or remotely when battery capacity falls below 80% of original capacity. Battery testing may also be user initiated via front panel or serial communications.</li> </ol>
Safety Access	Restricted access
Degree of protection	IP20 with standard washable dust filters protection against medium sized foreign matter (incl. finger)
Safety	
	a) IEC 62040 or EN 62040 b) EN 60950
Emission and Immunity:	IEC62040-2-C3 (conducted and radiated) EN61000-4,-5, level 4 – 4 kV L-PE, 2kV L-L Electrostatic discharge (ESD): 8 kV air discharge, 4 kV contact discharge (IEC 61000-4-2, level 3) Electromagnetic field: IEC 61000-4-8 level 4.
Marking	CE-mark

**5.** DG Sets (20Kva, 25 Kva, 30 Kva, 40 Kva, 50 Kva, 58.5 Kva, 82.5 Kva, 100 Kva, 125 Kva, 160 Kva, 200 Kva)

Providing, Installing, Testing and Commissioning of 'silent type liquid/air cooled, Turbo Charged DG set having Prime Power Rating, 415 volts at 1500 RPM, 0.8 lagging power factor at 415 Volt suitable for 50 Hz, 3 phase system & for 0.85 Load Factor and consisting of the followings:

#### a) Diesel Engine:

Diesel engine, 4 stroke, liquid/air cooled, electric start, of suitable BHP at 1500 RPM suitable for above output of alternator at 40 Degree C, 50% RH & at 1000 Meter MSL and conforming to BS 5514, IS 10000, capable of taking 10% over loading for one hour after 12 hours of continuous operation. The engine will be fitted complete with all the required accessories.

b) Engine mounted instrument Panel fitted with and having digital display for following:

i) Start-stop push button

ii) Coolant temperature indication

iii) RPM indication





iv) Over speed indication

v) Low lub Oil trip indication

vi) Engine Hours indication

vii) Fuel Consumption

#### c) Alternator:

Synchronous alternator, 415 Volts at 1500 RPM, 3 phase 50 Hz, AC supply with 0.8 lagging power factor at 40 Degree C, 50% RH and at 1000 Meter MSL. The alternator shall be having SPDP enclosure, brushless, continuous duty, self-excited and self-regulated through AVR conforming to IS: 4722/13364, suitable for tropical conditions and with class 'H' insulation.

#### d) Base Frame & Foundation:

Both the engine and alternator shall be mounted on suitable base frame with necessary reinforcement which shall be installed on suitable cement concrete foundation and vibration isolation arrangement as per recommendations of manufacturer.

#### e) Fuel Tank:

Daily service fuel tank of as per manufacturer's standard fabricated from M.S. sheet complete with all standard accessories and fuel piping between fuel tank and diesel engine with MS pipes of suitable dia. Complete with valves, level indications & accessories as required as per specifications.

#### f) Exhaust System

As per OEM standard & design.

#### g) Starting System

12~V / 24V DC starting system comprising of starter motors: voltage regulator and arrangement for initial excitation complete with suitable nos. lead acid type batteries of suitable plates /capacity as per OEM standard .

**h)** Acoustic and weather proof enclosure with arrangement for fresh air intake for cooling of the engine & alternator, extraction, discharging hot air in to the atmosphere as per specifications.

#### i) AMF Panel

Fabrication, installing, testing & commissioning of outdoor type automatic mains failure control for silent type DG set, 415V, 3 Phase, 4 Wire 50 Hz AC supply system fabricated in compartmentalized (preferably) design from CRCA sheet steel of 1.6 mm thick for frame work and covers, complete with 7 tank process for powder coating in approved shade, complete with relays, timers, set of CT's for metering & protection and to indicate currents, phase and line voltages, frequency, power factor, KWH, control cabling from AMF panel to DG set and elsewhere if required, all complete and including the following:

a) 2 Nos. suitably rated power contactors complete with aux. contactor blocks for electrical 1 interlocking, 415V wide band coils capable of handling voltage variations.

b) Auto/ Manual/ Off Selector Switch.

c)Sets of CTs of 2.5 VA burden and accuracy class 1.0 for metering

d) LED type Indicating lamps for load 'on mains' and load 'on set'

e) Fuse for instruments, Adequate no. of MCB's

f) Battery charger shall be as per OEM standard & design.

g) Should be ISO, ARIAI Certified, 1. IS 10378: Code of practice for control of noise pollution from generators, IS 11294: Code of practice for control of air pollution from generators



- **6.** Stabilizer (1Kva 10Kva)
  - a. Should have ITD (Intelligent Time Delay) System.
  - b. Should have Low and High Voltage Cut-off Protection.
  - c. Should have Wide Range of Products for different Appliances.
  - d. Should Perform in Wide Input Range from 90V-300V
  - e. Should have ISO Certified.
  - f. Should have Product Replacement Warranty under Warranty Period.
- 7. 10KVA Inverter along with Batteries

1	Input Frequency	40-60 Hz
2	Input Voltage	360 - 460V (3 Phase)
3	Input Power factor	0.99
	Output	9-10 kW
4	Powe	
5	r Capacity	220
5	output voltage	230
6	Efficiency in full	>90% in energy saving mode
0	load	
7	Wave form	Sine wave
8	Input Protection	Circuit Breaker
9	Battery Types	SMF VRLA
	Operating Temperature	0-50°C
10		
11	Voltage	± 5%
11	Provide d Margin	
	Max	60-80 Amps
12	Chargin	00-00 Amps
	g Current(in Amps)	
13	Batteries	12V 150AH Sealed batteries of standard make 10in number
14	Run Time (Up To)	2 Hrs minimum at full load
15	Recharge Time	5 hour(s)
16	Connecting cables	Should be provided by the Vendor
	Input and Output MCBs	Should be provided by the Vendor
17		
18	Stand/ Racks	Should be provided by the Vendor to keep the batteries
19	Installation	Should be done at the different PHC/CHC site
20	Price*	Basic price and taxes applicable to be shown separately
21	Warranty	Comprehensive onsite warranty; 1 year on batteries and 2 years on Inverter.





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1	Input Frequency	50 Hz
2	Input Voltage	180V – 240V (Single Phase)
3	Input Power factor	0.99
4	Output Power Capacity	4- 4.5 kW
5	output voltage	230 V
6	Efficiency in full load	>90 – 95% in energy saving mode
7	Wave form	Sine wave
8	Input Protection	Circuit Breaker
9	Battery Types	SMF VRLA
10	Operating Temperature	0-50°C
11	Voltage Provided Margin	± 5%
12	Max Charging Current(in Amps)	50-60 Amps
13	Batteries	12V 150AH Sealed batteries of standard make 4in number
14	Run Time (Up To)	1 1/2 Hrs minimum at full load
15	Recharge Time	3 hour(s)
16	Connecting cables	Should be provided by the Vendor
17	Input and Output MCBs	Should be provided by the Vendor
18	Stand/ Racks	Should be provided by the Vendor to keep the batteries
19	Installation	Should be done at the different PHC/CHC site
20	Price*	Basic price and taxes applicable to be shown separately
21	Warranty	Comprehensive onsite warranty; 1 year on batteries and 2 years on Inverter.

#### 9. 3 KVA Inverter along with Batteries

1	Input Frequency	50 Hz
2	Input Voltage	180 – 230V (Single Phase)
3	Input Power factor	0.99
4	Output Power Capacity	2.5-2.9 kW
5	output voltage	230 V
6	Efficiency in full load	>90 – 95% in energy saving mode
7	Wave form	Sine wave
8	Input Protection	Circuit Breaker
9	Battery Types	SMF VRLA





10	Operating Temperature	0-50°C
11	Voltage Provided Margin	± 5%
	Max Charging Current(in	30-50 Amp
12	Amperes)	
13	Batteries	12V 150AH Sealed batteries of standard make 2 or 3 in number
14	Run Time (Up To)	1 Hrs minimum at full load
15	Recharge Time	2 hour(s)
16	Connecting cables	Should be provided by the Vendor
17	Input and Output MCBs	Should be provided by the Vendor
18	Stand/ Racks	Should be provided by the Vendor to keep the batteries
19	Installation	Should be done at the different PHC/CHC site
20	Price*	Basic price and taxes applicable to be shown separately
21	Warranty	Comprehensive onsite warranty; 1 year on batteries and 2 years on Inverter.

- Note: 1. Bidder should have Experience of Earthing Works and Integrating with UPS/Stabilizer or DG Sets or Inverter, Completion/Installation Report to be enclosed.
  - 2. Bidder Should have at least One Electrical and One Biomedical Engineer in Khasi/Jaintia Hills Region and Garo Hills Region
  - 3. Earthing wherever required is to be done at no additional cost. Below mentioned specification of Earthing is to be followed:

Technical specifications of Chemical Earthing systems

Sl. No	Items	Specifications
1	Earth Electrode:	
1.1	Material	• Copper-bonded steel rod or galvanized iron (GI) rod, treated to resist corrosion.
1.2	Dimensions	<ul> <li>Copper-Bonded Steel Rod: Minimum 17 mm diameter and 3 meters length.</li> <li>GI Rod: Minimum 25 mm diameter and 3 meters length.</li> </ul>



1.3	Standard Compliance	• IS 3043: 2018 (Code of Practice for Earthing), IS 1239 for GI material, and IEC 62561-7 for earthing components.
1.4	Copper Coating Thickness	• For copper-bonded rods, a minimum coating thickness of 250 microns is required.
2	Backfill Compound:	
2.1	Material	• A conductive, non-corrosive, and moisture-retaining compound such as bentonite, graphite powder, or a proprietary chemical compound.
2.2	Properties	<ul> <li>Hygroscopic (absorbs and retains moisture to maintain low resistance).</li> <li>Non-corrosive to both the electrode and the surrounding soil.</li> <li>Should reduce soil resistivity and stabilize the performance of the earthing system</li> </ul>
2.3	Standards	• The backfill compound should completely surround the electrode in the borehole to ensure uniform contact with the electrode
3	Earth Pit Construction:	
3.1	Borehole Size	• A borehole of 150 mm to 200 mm diameter and at least 3 meters depth.
3.2	Electrode Installation	• The electrode should be centered in the borehole and surrounded by the backfill compound. The compound should be layered and compacted to remove air gaps.
3.3	Top of Electrode	• Ensure the top of the electrode is at least 300 mm below ground level to protect it from mechanical damage and environmental exposure.





4	Installation	
4.1	Site Selection	<ul> <li>Choose a location away from heavy traffic areas and any underground utilities.</li> <li>Ensure the selected site has sufficient space for multiple earthing pits if negative for multiple installations.</li> </ul>
4.2	Connection to Earthing System	<ul> <li>required for parallel installations.</li> <li>Connect the electrode to the hospital's earthing network using copper or GI earthing strips.</li> <li>Copper Strip: Minimum 25 mm x 3 mm size.</li> <li>GI Strip: Minimum 25 mm x 6 mm size.</li> <li>Secure connections using brass or stainless-steel fasteners with anticorrosion treatment.</li> <li>Preferred methods for joining conductors include exothermic welding or crimping.</li> </ul>
4.3	Inspection Chamber/Pit cover	<ul> <li>Install an inspection chamber / Pit cover around the earth pit for periodic inspection and testing.</li> <li>The cover should be flush with the ground and labelled with the earthing details for easy identification.</li> </ul>
5	Testing and commissioning:	
5.1	Earth's resistance measurement	<ul> <li>The resistance of the chemical earthing system should be tested using an Earth Resistance Tester.</li> <li>The desired resistance value should be below 1 ohm for critical areas like operating rooms, ICUs, and below 2 ohm for other sensitive hospital equipment zones.</li> </ul>
6	Quality assurance:	



6.1	Material Quality	• Use ISI-certified materials and
		components.
		• Ensure that all materials meet the
		specified standards for corrosion resistance,
		conductivity, and durability.

Technical specifications of Plate Earthing systems

Sl.No	Items	Specifications
1	Earthing Plate:	
1.1	Material:	• Copper or galvanized iron (GI) treated to resist corrosion.
1.2	Dimensions:	<ul> <li>Copper Plate: Minimum 600 mm x 600 mm x 3.15 mm thick</li> <li>GI Plate: Minimum 600 mm x 600 mm x 6 mm thick</li> </ul>
1.3	Standard Compliance	• Copper plate should comply with IS: 1897, and GI plate should comply with IS: 2629 for galvanization.
2	Backfill Compound:	
2.1	Material	• A mixture of salt, charcoal, and soil is recommended to surround the earth plate.
2.2	Proportion	• For every meter of the pit, use approximately 10 kg of salt and 10 kg of charcoal.
2.3	Standards	• Backfill materials should be free of stones, gravel, and other debris to ensure low resistance.
3	Earth Pit Construction:	
3.1	Pit Size	• Minimum dimensions of the pit should be 1.5 meters x 1.5 meters x 3 meters deep (depending on the water table and soil resistivity).



3.2	Location	• The earth pit should be situated away from the building foundation, typically at a distance of 1.5 meters from the exterior wall.
4	Installation:	
4.1	Excavation	<ul> <li>Excavate a pit of the required dimensions (1.5 m x 1.5 m x 3 m deep).</li> <li>Ensure the pit is free from waterlogging and away from other utility lines.</li> <li>Ensure the selected site has sufficient space for multiple earthing pits if required for parallel installations.</li> </ul>
4.2	Plate Placement	<ul> <li>Place the copper or GI plate vertically at the centre of the pit.</li> <li>The top edge of the plate should be at least 1.5 meters below the ground level.</li> </ul>
4.3	Connection of Earth Electrode	<ul> <li>Securely connect the earth conductor (GI or copper strip) to the plate using appropriate connectors (brass or same material as the conductor).</li> <li>GI Strips should be connected to GI Plate and Copper Strip should be connected to Copper Plate.</li> <li>Route the conductor up to the surface, ensuring it is protected from mechanical damage</li> </ul>
4.4	Inspection Chamber/ Pit cover	<ul> <li>Install an inspection chamber/Pit cover around the earth pit for periodic inspection and testing.</li> <li>The cover should be flush with the ground and labelled with the earthing details for easy identification.</li> </ul>



5	Testing and commissioning:	
5.1	Earth's resistance measurement	<ul> <li>The resistance of the earthing system should be tested using an Earth Resistance Tester.</li> <li>The desired resistance value should be below 1 ohm for critical areas like operating rooms, ICUs, and below 2 ohm for other sensitive hospital equipment zones.</li> </ul>
6	Quality assurance:	Use ISI-certified materials and components.
6.1	Material Quality:	• Ensure that all materials meet the specified standards for corrosion resistance, conductivity, and durability.





Annexure - I

#### SOLVENCY CERTIFICATE

This is to certify that Shri/Smt/Ms\_

is a reputed contractor/firm with adequate financial

Standing.

If the contract for the work, namely "FOR SUPPLY, INSTALLATION AND COMMISSIONING OF GENERATOR, UPS, STABILIZER AND INVERTER FOR MEGHALAYAN MEDICAL DRUGS & SERVICES LTD" is awarded to the above Bidder/firm, we shall be able to provide overdraft/credit facilities to the extent Rs\_\_\_\_\_\_

\_(Rupees\_

) only

To meet his/her/their working capital requirement for the execution of the above mentioned work.

Signature of Bank Authority Name of the Bank Designation Complete Address

Annexure - II

# INFORMATION REGARDING CURRENT LITIGATION, DEBARRING / EXPELLING OF TENDER OR ABANDONMENT OF WORK BY TENDERER

- 1. (a) Does the applicant or its constituent partners have a consistent history of litigation awarded against him? Yes / No
  - (b) If yes, give details.



2.	(a)	Has the Applicant been debarred / expelled by any Agency in India, during the last five years, expecting on account of reasons other than non- performance?	Yes / No
	(b)	If yes, give details.	
3	(a)	Has the applicant during the last 5 years abandoned any contract work in India?	Yes / No
	(b)	If yes, give details.	
4	(a)	Has the applicant been declared bankrupt during the last 5 years.	Yes / No
	(b)	If yes, give details, including present status.	
Note	:	If any information in this schedule is found to be incorrect or concealed application will be summarily rejected.	l, prequalification

#### Signature of Bidder/Firm

Name in Block Letter

Complete Postal Address

Annexure - III





Department of Health & Family Welfare, DHS Complex, Laitumkhrah, New Colony, Shillong - 793003, East Khasi Hills, Meghalaya - 793003 +91-9863033404 / 9863048955 meghmdsl@gmail.com

To,

The Managing Director MMDSL Shillong, Meghalaya

#### WHEREAS

We [insert complete name of Manufacturer], who are official manufacturers of [insert type of goods manufactured], having factories at [insert full address of Manufacturer's factories], do hereby authorize \_\_\_\_\_\_\_\_ to submit a Bid the purpose of which is to provide the following Goods, manufactured by us[insert name and or brief description of the Goods], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with the General Guidelines of Contract, with respect to the Goods offered by the above firm.

Signed:[insertsignature(s)ofauthorizedrepresentative(s)oftheManufacturer]

Name:[insert complete name(s) of authorized representative(s) of the Manufacturer]

Title:[insert title]

Dated on \_\_\_\_\_\_ day of \_\_\_\_\_\_, \_\_\_ [insert date of signing]





Annexure -IV

#### **LETTER OF UNDERTAKING**

To, Managing Director, MMDSL Health Complex, Laitumkrah Shillong, Meghalaya Tender No:-Tender Date:-For:-

Sir,

1. I, \_\_\_\_\_, on behalf of \_\_\_\_\_, having its registered office at \_\_\_\_\_ and its branch office at \_\_\_\_\_\_ do hereby declare to comply with all the Terms and Condition as specified in the SNIT. The rates quoted by me/ us are valid and binding on me/us for acceptance for a period of one year minimum from the date of award of contract to us.

2. We agree to the condition of the tender under which the Earnest Money Deposit shall be forfeited by us.

3. The tender inviting authority has the right to accept or reject any or all the tenders without assigning any reason thereof.

4. We understand all the Terms and Conditions of the Contract and bind myself / ourselves to abide by them.

5. I hereby furnish the following details as specified by the SNIT.

FIRM	Firm Name	
DETAILS		
	Proprietorship /	
	Entrepreneurship/Holding	
	Company, Partnership Firm	
	Name of	
	Proprietor/Director/CEO/Others	
	Address	
	Telephone Number	
	Fax Number	
	Mobile Number	
	Email Id	



	Bank Name	
BANK DETAILS	Address	
	Account Number	
	IFSC Code	
	NEFT Code	

6. We hereby declare that as per the attached Affidavit, there is no vigilance /CBI or Court Case pending / Contemplated against us at the moment.

7. All information provided is True & Accurate. If at any time it is found that any information provided is proven false, I agree to the Cancellation / Termination of the Tender / Agreement leading up to blacklisting of the Said firm under the Government of Meghalaya for a period of three years.

SIGNATURE NAME & ADDRESS OF BIDDER DATE

#### Annexure - V

#### **BID SECURITY FORM**

 Whereas\_\_\_\_\_\_, (hereinafter called '' the Bidder'') has submitted its bid dated \_\_\_\_\_\_ for

 \_\_\_\_\_\_\_vide Tender No.\_\_\_\_\_\_dated \_\_\_\_\_KNOW ALL MEN by these presents that We

 \_\_\_\_\_\_\_, having our office at \_\_\_\_\_\_\_ (hereinafter called "the Bidder") are bond unto

 MMDSL, Meghalaya (hereinafter called "the Purchaser") the sum of Rs. \_\_\_\_\_\_ vide DD no. \_\_\_\_\_\_ for

 which payment will and truly to be made of the said Purchaser, the Bidder binds itself, its successors and

 assigns by these present.

THE CONDITION of the obligation is:

- 1. If the Bidder withdraws his bid during the period of bid validity specified by the Bidder on the Bid from OR
- 2. If the Bidder, having been notified of the acceptance of his bid by the purchase during the Period of bid validity
- a) fails or refuses to execute the Contract, if required; or
- b) fails or refuses to furnish the Performance Security, in accordance with the instructions to Bidders.

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the purchaser having to substantiate its demand, provided that in its demand, the purchaser will



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note that the amount claimed by it is due to it owning the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force as to the bidders of the Bid Document up to and including Ninety (90) days from date of opening the Tender and any demand in respect thereof should reach the Bidder not later than date to be specified.

Signature of the Bidder Name Signed in Capacity of Full address of Office Tel No. of Office

**Annexure VI** 



MEGHALAYAN

Department of Health & Family Welfare, DHS Complex, Laitumkhrah, New Colony, Shillong - 793003,

Sl. <b>-</b> no.	Name of the Item	CES LIMI Name of Manufacturer	<b>TED</b> Government of Megh Indian/Imported /Country Of Origin	samples/Catalogues and Compliance certificate YES/NO	9863048955 Deviation to Specifications if any with reason	Warranty Period
1	Uninterruptible Power Supply (UPS) System					
а	3 Kva					
b	6 Kva					
c	10 Kva					
d	15 Kva					
e	20 Kva					
f	30 Kva					
g	40 Kva					
2	DG Sets					
а	20Kva					
b	25 Kva					
c	30 Kva					
d	40 Kva					
e	50 Kva					
f	58.5 Kva					
g	82.5 Kva					
h	100 Kva					
i	125 Kva					
j	160 Kva					
k	200 Kva					
3	Stabilizer					
а	1 Kva					
b	2 Kva					
c	3 Kva					
d	5 Kva					
e	10 Kva					
4	Inverter along with Batteries					
а	3 Kva					
b	5 Kva					
c	10 Kva					
Note:						

- 1. All information in the above format are mandatory and bidders are requested to furnish the same without fail.
- 2. All bidders should furnish a catalogue, a physical sample to be furnished as and when requested by the tender committee failing which bidder will be disqualified.



#### Annexure- VII

#### PERSONNEL IN THE EMPLOYMENT OF THE TENDERER

Sl No.	Personnel	Min. Qualification required	Min Requirement (numbers)
1	Project In charge	B.E (Electrical)/Diploma (Electrical)	1
2	Supervisor	Degree/Diploma (Biomedical Engineer)	1

#### Signature of Bidder/Firm

Name in Block Letter\_

Complete Postal Address

#### Notes:

- 1. Undertaking from the technical personnel to be enclosed.
- 2. Educational qualification certificates of technical personnel to be enclosed.



# MEGHALAYAN MEDICAL DRUGS & SERVICES LIMITED



Department of Health & Family Welfare, DHS Complex, Laitumkhrah, New Colony, Shillong - 793003, East Khasi Hills, Meghalaya - 793003 +91-9863033404 / 9863048955 meghmdsl@gmail.com

#### Annexure - B

FINANCIAL BID						
Item No.	Name of Items	UNIT	Basic Price/Unit (in Rs) Per Unit in Figure) up to destination (A)	Tax rate per unit up to destination (B)	Any Other charges up to destination to be clearly mention here and be specify (C)	Total Cost/unit (A+B+C)
1	2	3	4	5	6	7
1	Uninterruptible Power Supply (UPS) System					
a	3 Kva	Each				
b	6 Kva	Each				
c	10 Kva	Each				
d	15 Kva	Each				
e	20 Kva	Each				
f	30 Kva	Each				
g	40 Kva	Each				
2	DG Sets					
а	20Kva	Each				
b	25 Kva	Each				
c	30 Kva	Each				
d	40 Kva	Each				



# MEGHALAYAN MEDICAL DRUGS & SERVICES LIMITED



Department of Health & Family Welfare, DHS Complex, Laitumkhrah, New Colony, Shillong - 793003, East Khasi Hills, Meghalaya - 793003 +91-9863033404 / 9863048955 meghmdsl@gmail.com

e	50 Kva	Each		
f	58.5 Kva	Each		
g	82.5 Kva	Each		
h	100 Kva	Each		
i	125 Kva	Each		
j	160 Kva	Each		
k	200 Kva	Each		
3	Stabilizer			
a	1 Kva	Each		
b	2 Kva	Each		
c	3 Kva	Each		
d	5 Kva	Each		
e	10 Kva	Each		
4	Inverter along with Batteries			
a	3 Kva	Each		
b	5 Kva	Each		
с	10 Kva	Each		



# **MEGHALAYAN MEDICAL DRUGS &** SERVICES LIMITED Government of Meghalaya



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A GOVT OF MEGHALAYA UNDERTACKING

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