

SEALED QUOTATION DOCUMENT

Procurement of Goods Sealed Quotation

Supply, Delivery, Installation, Testing & Commissioning of 110 VDC MFVRLA Battery Bank

**Issued by:
NEA, Devighat Hydropower Station
Bidur Nuwakot Bidur Nuwakot**

Sealed Quotation Number

NEA-DHPS-2081/82-ESQ-02

Issued On

22-01-2025

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Abbreviation

BDS.....	Bid Data Sheet
BD	Bidding Document
DCS.....	Delivery and Completion Schedule
DP	Development Partner
EQC	Evaluation and Qualification Criteria
GCC	General Conditions of Contract
GoN	Government of Nepal
ICC.....	International Chamber of Commerce
IFB	Invitation for Bids
ITB	Instructions to Bidders
LGRS	List of Goods and Related Services
NCB	National Competitive Bidding
PAN	Permanent Account Number
PPMO	Public Procurement Monitoring Office
SBD.....	Standard Bidding Document
SBQ.....	Schedule of Bidder Qualifications
SCC.....	Special Conditions of Contract
SR	Schedule of Requirements
TS.....	Technical Specifications
VAT	Value Added Tax

Section - I
Invitation for Sealed Quotation

Invitation for Sealed Quotation

Name of the Office: NEA, Devighat Hydropower Station

Address of the Office: Bidur Nuwakot Bidur Nuwakot

Invitation for Sealed Quotation for the procurement of Supply, Delivery, Installation, Testing & Commissioning of 110 VDC MFVRLA Battery Bank

Sealed Quotation No: NEA-DHPS-2081/82-ESQ-02

Date of Publication : 22-01-2025

1. The NEA, Devighat Hydropower Station invites sealed quotations from registered Suppliers for the Supply, Delivery, Installation, Testing & Commissioning of 110 VDC MFVRLA Battery Bank .
2. Eligible Suppliers may obtain further information and inspect the Sealed quotation Forms at the office of Bidur Nuwakot Bidur Nuwakot , 010560195, , devighat@nea.org.np.
OR
[may visit PPMO website www.bolpatra.gov.np.]
3. If hard copy is allowed then a complete set of Bidding Documents may be purchased from the office NEA, Devighat Hydropower Station Bidur Nuwakot Bidur Nuwakot and the office NEA, Devighat Hydropower Station Bidur Nuwakot Bidur Nuwakot by eligible Bidders on the submission of a written application, along with the copy of company/firm registration certificate, and upon payment of a non-refundable fee of NRs.1000.0 till 06-02-2025 12:00 during office hours.
4. Bidder who chooses to submit their bid electronically may download the bidding documents for e-submission from PPMO's e-GP i.e www.bopatra.gov.np/egp. Bidders, submitting their bid electronically, should deposit the cost of bidding document in the following account
 - i. Name of the Bank :Nabil Bank Ltd.
 - ii. Name of Office :NEA, Devighat Hydropower Station
 - iii. Office Code no :
 - iv. Office Account No :00201017505410
 - v. Rajaswa (revenue) Shirshak No :
5. Sealed bids must be submitted to the office NEA, Devighat Hydropower Station Bidur Nuwakot Bidur Nuwakot by hand or through e-GP system i.e www.bopatra.gov.np/egp on or before 06-02-2025 12:00. Bids received after this deadline will be rejected.
6. The bids will be opened in the presence of Bidders' representatives who choose to attend at 06-02-2025 14:00 at the office of NEA, Devighat Hydropower Station
Bidur
Bidur, Nuwakot
Bagmati Province
Nuwakot
Nepal.
Bids must be valid for a period of 45 days after bid opening and must be accompanied by a bid security amounting to a minimum of 39000 , which shall be valid for 30 days beyond the validity period of the bid (i.e. [Refer Clause ITB 20.1]). If bidder wishes to submit the Cash Security, the cash should be deposited in Deposit Account No.[00201017505410] at [Nabil Bank Ltd. , Battar, Nuwakot] and submit the receipt of the deposited amount of cash along with the Sealed Quotation.
7. If the last date of purchasing and /or submission falls on a government holiday, then the next working day shall be considered as the last date. In such case the validity period of the bid security shall remain the same as specified for the original last date of bid submission
8. The Purchaser reserves the right to accept or reject, wholly or partly any or all the Sealed Quotations without assigning any reason, whatsoever.

Section - II

Instructions to Bidders

Notes on the Instructions to Bidders

This section of the bidding documents should provide the information necessary for Interested Suppliers to prepare responsive bids, in accordance with the requirements of the Purchaser. It should also give information on bid submission, opening and evaluation, and award of Contract. These Instructions to Bidders shall not be part of the Contract and shall cease to have effect once the Contract is signed.

Section II Instructions to Bidder

1. Scope of Works 1.1 The Purchaser stated in the BDS for the procurement of Goods as detailed in attached specifications, drawings and the bill of quantities provided herein. The name of Purchaser, name of project and contract identification number of Contracts are provided in the BDS.

2. Eligible Bidder 2.1 This Invitation for Bids is open to all registered Suppliers with eligibility criteria specified below.

Sl. No.	Criteria Title
1	Up to date Firm/Company Registration Certificate
2	VAT and PAN Registration Certificates
3	Tax Clearance Certificate (F/Y 2080/81)
4	Other documents as needed as mentioned technical data sheet (End user certificate of bidder or manufacturer , valid ISO 9001 certificate, Manufacturers Authorization Certificate, Product Catalogue/datasheet,)

2.2 A bidder declared blacklisted and ineligible by the GoN, Public Procurement Monitoring Office (PPMO) and/or the DP in case of DP funded project, shall be ineligible to bid for a contract during the period of time determined by the GoN, PPMO and/or the DP.

3. One Quotation per Bidder 3.1 Each Bidder shall submit only one quotation, A Bidder who submits more than one quotation shall cause all the quotations with the Bidder's participation to be disqualified.

4. Cost of Bidding 4.1 The Bidder shall bear all costs associated with the preparation and submission of his Quotation and the Purchaser shall in no case be liable for those costs.

5. Site Visit 5.1 The Bidder at his own cost, responsibility and risk may visit the site of the supply, delivery or installation of Goods and acquire all necessary information for preparing the bid and entering into a contract for the procurement of Goods.

6. Content of Quotation Form 6.1 The Quotation Form comprise the documents listed below:
1. Section I: Invitation for Sealed Quotation (SQ)
2. Section II: Instructions to Bidders
3. Section III: Bid Data Sheet
4. Section IV Quotation Forms and Price Schedule
5. Section V: Schedule of Requirements
6. Section VI: General Conditions of Contract (GCC)
7. Section VII: Special Conditions of Contract
8. Section VIII: Contract Form

7. Clarification 7.1 A prospective Supplier/Bidder may obtain clarification on the Quotation Form from the the Purchaser on or before 5 days prior to the deadline for submission of Quotation.

8. Language of Quotation 8.1 All documents relating to the Quotation shall be in English or in Nepali.

9. Documents Comprising Quotation 9.1 The Quotation by the Bidder shall comprise the following:
a. Quotation Form and Price Schedules
b. Bid Security
c. Schedule of Requirements

10. Quotation Prices 10.1 The Bidder shall indicate on the appropriate Price Schedule the unit prices (where applicable) and total price in Nepali Rupees. for all items of the goods to be supplied under the contract.
10.2 All duties, taxes and other levies payable by the Bidder under the contract shall be included in the rates, prices and total Bid Price submitted by the Bidder.
10.3 Price quoted by the Bidder shall remain fixed and valid until completion of the Contract Performance and will not be subject to variation in any account.

11. Quotation Validity 11.1 The Sealed Quotation shall remain valid for the period of 45 days after opening of the quotation. A bid valid for a shorter period shall be rejected by the Purchaser as nonresponsive.

12. Quotation/Bid Security
- 12.1 The Bidder shall furnish as part of its Sealed Quotation, in original form, a bid security as specified in the BDS. In case of e-submission of Quotation, the Bidder shall upload scanned copy of Bid security letter at the time of electronic submission of the Sealed Quotation. The Bidder accepts that the scanned copy of the Bid security shall, for all purposes, be equal to the original. The details of original Bid Security and the scanned copy submitted with e-Sealed Quotation should be the same otherwise the Sealed Quotation shall be non-responsive.
- 12.2 The Bid Security shall be, at the Bidder's option, in any of the following forms:
- (a) an unconditional bank guarantee from Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law or;
 - (b) a cash deposit voucher in the Purchaser's Account as specified in the BDS
- In the case of a bank guarantee, the Bid Security shall be submitted either using the Bid Security Form included in Section III (Bidding Forms) or in another Form acceptable to the Purchaser. The form must include the complete name of the Bidder. The Bid security shall be valid for minimum thirty (30) days beyond the original validity period of the bid
- 12.3 Any Sealed Quotation not accompanied by an enforceable and substantially compliant bid security, shall be rejected by the Purchaser as nonresponsive. In case of e-Submission, if the scanned copy of an acceptable Bid Security letter is not uploaded with the electronic Bid then Bid shall be rejected.
- 12.4 The Bid security shall be forfeited if:
- (a) a Bidder requests for withdrawal or modification during the period of Quotation validity specified by the Bidder on the Letter of Bid, after Sealed Quotation submission deadline.
 - (b) a Bidder changes the prices or substance of the Sealed Quotation while providing information;
 - (c) a Bidder involves in fraud and corruption pursuant to clause 26;
 - (d) the successful Bidder fails to:
 - (i) furnish a performance security in accordance with clause 25;
 - (ii) sign the Contract in accordance within the period stipulated in Letter of Award.; or
 - (iii) accept the correction of arithmetical errors pursuant to clause 19.1
 - (iv) fails to provide the clarification of its Quotation by the date and time set in the Purchaser's
13. Format and Signing of Quotations
- 13.1 The Quotation shall be typed or written in indelible ink and shall be signed by an authorized person. Any entries or amendments including alternations, additions or corrections made shall be initialled by the same authorized person.
14. Sealing and Marking of Quotations
- 14.1 Bidders may submit their bids by manually or by electronically. When so specified in the BDS. Procedures for submission, sealing and marking are as follows:
Bidders submitting bids by manually. The Bidder shall submit his bid in sealed envelopes. The envelope shall be addressed to the Purchaser as specified in the BDS and shall bear the name and identification number of the Sealed quotation.
- 14.2 Bidders submitting Bids electronically shall follow the electronic bid submission procedure specified in the BDS
15. Deadline for Submission of Quotations
- 15.1 Quotations shall be delivered to the Purchaser at the address no later than the time and date specified in the BDS.
16. Late Quotation
- 16.1 Any Quotation received by the Purchaser after the deadline shall not be accepted and shall be returned unopened to the Bidder upon request.
17. Modification And Withdrawal
- 17.1 Sealed Quotations once submitted shall not be withdrawn or modified.
18. Bid Opening
- 18.1 The Purchaser shall open the Quotations in the presence of the Bidders' representatives who choose to attend at the time and in the place as specified in the BDS
- 18.2 The Purchaser shall prepare and provide minutes of the opening including the information disclosed to those present.
19. Process to be Confidential
- 19.1 Information relating to the examination, evaluation and comparison of Quotations and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any efforts by the Bidder to influence the Purchaser in the Quotation evaluation, comparison or contract award decisions may result in rejection of Bidder's quotation.
20. Examination of Quotations
- 20.1 Prior to the detailed evaluation of Quotations, the Purchaser shall determine whether each Quotation
- (a) meets the eligibility criteria defined in Clause 2;
 - (b) has been properly signed by the authorized person;
 - (c) is accompanied by the required securities; and
 - (d) is substantially responsive to the requirements of the Bidding documents.

21. Evaluation and Comparison of Quotations
- 21.1 In evaluating the Quotations, the Purchaser shall determine for each Sealed Quotation the evaluated Quotation Price by adjusting any corrections for errors. Quotations shall be checked by the Purchaser for any arithmetic errors. Errors shall be corrected by the Purchaser as follows:
- only for unit price Contracts, if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
 - if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
 - If there is a discrepancy between the Quotation price in the Summary of Price Schedule and the Quotation amount in item (c) of the Letter of Quotation, the price in the Summary of Price Schedule will prevail and the Quotation amount in item (c) of the Letter of Quotation will be corrected.
 - if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) ,(b) and (c) above.
- 21.2 In case of e-submission of bid, upon notification from the Purchaser, the bidder shall also submit the original of documents comprising the Sealed Quotation as per ITB 9 for verification of submitted documents for acceptance of the e-submitted bid. If a Bidder does not provide original of document of its Sealed Quotation by the date and time set in the Purchaser's request for clarification, its bid may be rejected.
- 21.3 If the Bidder that submitted the lowest evaluated bid does not accept the correction of errors, its bid shall be disqualified and its Quotation security shall be forfeited.
- 21.4 In Case, a corruption case is being filed to Court against the Natural Person or Board of Director of the firm/institution /company or any partner of JV, such Natural Person or Board of Director of the firm/institution /company or any partner of JV such bidder's bid shall be excluded from the evaluation, if public entity receives instruction from Government of Nepal.
22. Award of Contract
- 22.1 The Purchaser shall decide the award of the contract to the Bidder whose Quotation is within the approved estimate and who has offered the lowest evaluated Price within Quotation validity period provided that such Bidder has been determined to be eligible in accordance with the provisions of Clauses 2.
- 22.2 In Case, a corruption case is being filed to Court against the Natural Person or Board of Director of the firm/institution /company or any partner of JV, such Natural Person or Board of Director of the firm/institution /company or any partner of JV such bidder's bid shall be excluded from the evaluation, if public entity receives instruction from Government of Nepal.
23. Purchaser's Right to Accept or Reject
- 23.1 The Purchaser reserves the right to accept or reject any Quotation or to cancel the bidding process and reject all Quotations, at any time prior to the award of the contract, without assigning any reasons whatsoever and without thereby incurring any liability to the affected Bidder or Bidders.
24. Notification of Award and Signing of Agreement
- 24.1 The Bidder whose bid is accepted and all other participating bidders shall be notified of the award by the Purchaser.
- 24.2 The notification (hereafter called the "Letter of Acceptance") to the successful Bidder shall state the sum that the Purchaser shall pay the Bidder in the execution and completion of the contract. Within 7 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver the Performance Security pursuant Clause 25 and sign the Agreement.
- 24.3 Inability of the Bidder to make an Agreement within the above stated period shall result in the forfeiture of the Bidder's Quotation Security and , upon which the Contract shall then be awarded to the next successive successful Bidder.
25. Performance Security
- 25.1 Within seven (7) days of the receipt of Letter of Acceptance from the Purchaser, the successful Bidder shall furnish the performance security as stated below from Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law in accordance with the conditions of Contract using Sample Form for the Performance Security included in Section VIII (Contract Forms), or another form acceptable to the Purchaser.
- If bid price of the bidder selected for acceptance is up to 15 (fifteen) percent below the approved cost estimate, the performance security amount shall be 5 (five) percent of the bid price.
 - For the bid price of the bidder selected for acceptance is more than 15 (fifteen) percent below of the cost estimate, the performance security amount shall be determined as follows:
Performance Security Amount = $[(0.85 \times \text{Cost Estimate} - \text{Bid Price}) \times 0.5] + 5\% \text{ of Bid Price}$.
The Bid Price and Cost Estimate shall be inclusive of Value Added Tax.

26. Corrupt or Fraudulent Practices
- 26.1 The Purchaser shall reject a bid for award if it determines that the Bidder recommended for award of contract has engaged in corrupt or fraudulent practices in competing for the contract in question.
- 26.2 In Case, a corruption case is being filed to Court against the Natural Person or Board of Director of the firm/institution /company or any partner of JV, such Natural Person or Board of Director of the firm/institution /company or any partner of JV such bidder's bid shall be excluded from the evaluation, if public entity receives instruction from Government of Nepal.
27. Conduct of Bidders
- 27.1 The Bidder shall be responsible to fulfil his obligations as per the requirement of the Contract Agreement, Bidding documents, GoN's Procurement Act and Regulations.
- 27.2 The Bidder shall not carry out or cause to carry out the following acts with an intention to influence the implementation of the procurement process or the procurement agreement :
- a) give or propose improper inducement directly or indirectly,
 - b) distortion or misrepresentation of facts
 - c) engaging or being involved in corrupt or fraudulent practice
 - d) interference in participation of other prospective bidders.
 - e) coercion or threatening directly or indirectly to cause harm to the person or the property of any person to be involved in the procurement proceedings,
 - f) collusive practice among bidders before or after submission of bids for distribution of works among bidders or fixing artificial/uncompetitive bid price with an intention to deprive the Purchaser the benefit of open competitive bid price..
- 27.3 contacting the Purchaser with an intention to influence the Purchaser with regards to the bid or interference of any kind in examination and evaluation of the bids during the period after opening of bids up to the notification of award of contract
28. Blacklisting Bidder
- 28.1 Without prejudice to any other right of the Purchaser under this Contract, GoN, Public Procurement Monitoring Office may blacklist a bidder for his conduct up to three years on the following grounds and seriousness of the act committed by the bidder:
- a) if it is proved that the bidder committed acts pursuant to the Sub-Clause 27.2,
 - b) if it is proved later that the bidder/Supplier had committed substantial defect in implementation of the contract or had not substantially fulfilled his obligations under the contract or the completed work is not of the specified quality as per the contract ,
 - c) if convicted by a court of law in a criminal offence which disqualifies the bidder from participating in the contract.
 - d) if it is proved that the contract agreement signed by the bidder was based on false or misrepresentation of bidder's qualification information,
 - e) Inability of the bidder signing the contract agreement, once the letter of acceptance to the successful bidder has been provided by the Purchaser.,
- 28.2 A firm declared blacklisted and ineligible by the GON shall be ineligible to bid for a contract during the period of time determined by the PPMO.
29. Publication of contract award notice
- 29.1 Within three days of contract signing, the Public Entity shall publish a notice on the contract award with following information: in its notice board as well as shall manage to publish the notice on the notice board of District Coordination Committee, District Administration Office, Provincial Treasury and Controller Office and District Treasury and Controller Office, Such notice shall also be posted in its website and PPMO's website.
- a. Name of the procurement,
 - b. IFB number,
 - c. date and name of newspaper published the IFB notice,
 - d. name of the successful Bidder, and the contract price.
- 29.2 The Purchaser shall promptly respond in writing to any unsuccessful Bidder who, within thirty days from the date of publication of contract award notice in accordance with ITB 29.1, requests in writing the grounds on which its bid was not selected.
30. Provision of PPA and PPR
- 30.1 If any provision of this document are inconsistent with Public Procurement Act (PPA), 2063 or Public Procurement Regulations (PPR), 2064, the provision of this documents shall be void to the extent of such inconsistency and the provision of PPA and PPR shall prevail.

Section III Bid Data Sheet

ITB 1	<p>The scope of Supply is : The number of the Invitation for Sealed Quotation (SQ) is :NEA-DHPS-2081/82-ESQ-02The Purchaser is: NEA, Devighat Hydropower Station The Name of the Project is :Supply, Delivery, Installation, Testing & Commissioning of 110 VDC MFVRLA Battery Bank</p>
ITB 10	<p>The Bidder shall furnish a bid security, from Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law with a minimum of NRs.39000, which shall be valid for 30 days beyond the validity period of the bid.</p>
ITB 10(a)	<p>Cash Deposit Account for Bid Security: Bank Name:Nabil Bank Ltd. Bank Address:Battar, Nuwakot Account holder's Name:Nea Devighat Hydropower Center Account Number:00201017505410</p>
ITB 14.1	<p>Bidders shall have the option of submitting their bids electronically. Bidders shall follow the electronic bid submission procedures specified below:</p> <ol style="list-style-type: none"> i. The bidder is required to register in the e-GP system https://www.bolpatra.gov.np/egp following the procedure specified in e-GP guideline. ii. Interested bidders may either purchase the bidding document from the Purchaser's office as specified in the BDS or may download the from e-GP system. iii. The registered bidders need to maintain their profile data required during preparation of bids. iv. In order to submit their bids electronically the cost of the bidding document shall be deposited in the account specified in IFQ. In addition, electronic scanned copy (.pdf format) of the bank deposit voucher/cash receipt should also be submitted along with the bid. v. The bidder can prepare the their bids using data and documents maintained in bidder's profile and forms/format provided in Sealed Quotation Document by Purchaser. The bidder may submit bids as a single entity or as a joint venture. The bidder submitting bid in joint venture shall have to upload joint venture agreement along with partner(s) Bolpatra ID provided during bidder's registration. vi. Bidders (all partners in case of JV) should update their profile data and documents required during preparation and submission of their bids. vii. In case of bid submission in JV, the consent of the partners shall be obtained through the confirmation link sent to the registered email address and the partners shall have to acknowledge their confirmation.The required forms and documents shall be part of technical bids: <ol style="list-style-type: none"> 1. Letter of Quotation (Mandatory) 2.Quotation Security /Bank Guarantee (Mandatory) 3. Company registration (Mandatory) 4. VAT registration (Mandatory) 5. Tax clearances certificate or evidence of tax return submission for the F/Y (Mandatory) 6. Power of Attorney of Bid signatory (Mandatory) 7. Completed Price Schedule (Mandatory) 8. Bank Voucher for cost of bid document (Mandatory) 9. Joint venture agreement (Mandatory in case of JV Bid) 10. Additional documents specified in Bidding Document (any other required documents, which is not against the provision of Procurement Act/Regulation/Directives and Standard Bidding Document issued by PPMO) <p>Note: The documents specified as "Mandatory" should be included in e-submission.</p> viii. After providing all the details and documents, bid response documents will be generated from the system. Bidders are advised to download and verify the response documents prior to bid submission. ix. For verifying the authentic user, the system will send one time password in the registered email address of the bidder. System will validate the OTP and allow bidder to submit their bid. x. Once Quotation is submitted, bidders won't able to modify/withdrawal their bid. xi. The Bidder/Quotation shall meet the following requirements and conditions for e-submission of bids: <ol style="list-style-type: none"> a) The e-submitted Quotations must be readable through PDF reader.The facility for submission of Quotation electronically through e-submission is to promote transparency, non-discrimination, equality of access, and open competition in the bidding process. The Bidders are fully responsible to use the e- submission facility properly in e-GP system as per specified procedures and in no case the Purchaser shall be held liable for Bidder's inability to use this facility.b) When a bidder submits electronic bid through the PPMO e-GP portal, it is assumed that the bidder has prepared the bid by studying and examining the complete set of the Bidding documents including specifications, drawings and conditions of contract.
ITB 15	<p>The deadline for Sealed Quotation submission is:06-02-2025 12:00 Address:Bidur Nuwakot Bidur Nuwakot</p>

ITB 18	<p>The Sealed Quotation opening shall take place at : Address :NEA, Devighat Hydropower Station Bidur Bidur, Nuwakot Bagmati Province Nuwakot Nepal Date and Time:06-02-2025 14:00</p> <p>a) e-GP system allows to download the Sealed Quotation response document only after bid opening date and time are met. Simultaneous login of two members of the opening committee is required for bid opening. b)The Purchaser shall conduct the opening of bid at the address on the same date and time as specified in bidding document in the presence of Bidders' representatives who choose to attend</p>
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Section - IV
Sample Forms

1. Quotation and Price Schedules

Date:

To: *[name and address of the Purchaser]*

Gentlemen and/or Ladies:

Having examined the Sealed Quotation (SQ) documents, we the undersigned, offer to supply and deliver *[description of goods and services]* in conformity with the said SQ documents for the sum of *[total SQ amount in words and figures]* or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this SQ.

We undertake, if our SQ is accepted, to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements.

If our SQ is accepted, we will obtain the guarantee of a bank in a sum equivalent to Five (5) percent of the Contract Price for the due performance of the Contract, in the form prescribed by the Purchaser.

We agree to abide by this SQ for a Period of **45** days from the date fixed for SQ opening it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this SQ, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any SQ you may receive.

Dated this _____ day of _____ 20_____.

[signature]

[in the capacity of]

Duly authorized to sign SQ for and on behalf of _____

2. Bidder's Information Form

[The Bidder shall fill in this Form. No alterations to its format shall be permitted and no substitutions shall be accepted. In case of joint venture, each partner shall fill the information in separate form.]

1.	Bidder's Legal Name	
2	Bidder's Address:	
3	Bidder's Country of Registration:	
4	Bidder's Year of Registration: .	
5	Bidder's Legal Address in Country of Registration	
6.	Bidder's Authorized Representative Information:Name: Address: Telephone/Fax numbers: Email Address:	
7	Bidder's Telephone/Fax numbers:	
8	Bidder's Email Address:	
	<p>Attached are copies of the following original documents.</p> <p><input type="checkbox"/> 1. Firm Registration Certificate</p> <p><input type="checkbox"/> 2. Authorization to represent the firm</p>	

3. Price Schedule for Goods

Name of Bidder _____ Contract Identification Number _____

Item	Description	Country of Origin	Quantity	Unit Price ¹ EXW		Total Price (in NRs) (cols. 4x5)
				(in NRs)		
				In Figure	In Words	
1	2	3	4	5		4x5=6
Total						
VAT						
Grand Total						

Note: Unit price shall include all custom duties and taxes, transportation cost to the final destination and insurance cost.

[If there are more than one lot/slice/package, prepare Price Schedule form for each lot/slice/package]

Name _____

In the capacity of _____

Signed _____

Duly authorized to sign the Sealed Quotation for and on behalf of _____

Date: _____

¹ The price shall include all customs duties and sales and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of the item or the customs duties and sales and other taxes paid on the previously imported item offered ex warehouse, ex showroom, or off-the-shelf. These factors should not be entered separately.

4. Bid Security

Bank's Name, and Address of Issuing Branch or Office

(On Letter head of the Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law)

Beneficiary: name and address of Employer.....

Date:.....

Bid Security No.:

We have been informed that [insert name of the Bidder] (hereinafter called "the Bidder") intends to submit its bid (hereinafter called "the Bid") to you for the execution of name of Contract under Invitation for Bids No. ("the IFB").

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the Bidder, we..... name of Bank.hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of.amount in figures (. amount in words) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- (a) has withdrawn or modifies its Bid during the period of bid validity specified by the Bidder in the Form of Bid; or
- (b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
- (c) having been notified of the acceptance of its Bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Agreement, or (ii) fails or refuses to furnish the performance security, in accordance with the ITB.
- (d) is involved in fraud and corruption in accordance with the ITB

This guarantee will remain in force up to and including the datenumber.....days after the deadline for submission of Bids as such deadline is stated in the instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

This Bank guarantee shall not be withdrawn or released merely upon return of the original guarantee by the Bidder unless notified by you for the release of the guarantee.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

Bank's seal and authorized signature(s) . . .

Note:

The bid security of has been counter guaranteed by the Bankon (Applicable for Bid Security of Foreign Banks).

Schedule of Requirement

1. List of Goods and Related Services

1 Electrical machinery apparatus equipment and consumables			
Procurement Item Details			
SL. No	Item Description	Unit of Measurement	Quantity
1	Supply and Delivery of MFVRLA 110V 350 AH Battery Bank complete with all accessories Steel Rack & Connector complete set as per specification.	set	1.0
2	Dismantle of existing battery bank	set	1.0
3	Installation, Testing & Commissioning of MFVRLA 110V 350 AH Battery Bank	set	1.0
4	spare battery (2 V per cell 350AH) MFVRLA	nos	10.0

2. Delivery and Completion Schedule

1 Electrical machinery apparatus equipment and consumables					
SL. No	Description of Goods	Final Destination	Earliest Delivery Date	Acceptable Delivery Date	Bidder's offered Delivery date
1	Supply and Delivery of MFVRLA 110V 350 AH Battery Bank complete with all accessories Steel Rack & Connector complete set as per specification.	Devighat Hydropower Station, Bidur, Nuwakot	120 Days from the date of Signing of Contract	120 Days from the date of Signing of Contract	
2	Dismantle of existing battery bank	Devighat Hydropower Station, Bidur, Nuwakot	120 Days from the date of Signing of Contract	120 Days from the date of Signing of Contract	
3	Installation, Testing & Commissioning of MFVRLA 110V 350 AH Battery Bank	Devighat Hydropower Station, Bidur, Nuwakot	120 Days from the date of Signing of Contract	120 Days from the date of Signing of Contract	
4	spare battery (2 V per cell 350AH) MFVRLA	Devighat Hydropower Station, Bidur, Nuwakot	120 Days from the date of Signing of Contract	120 Days from the date of Signing of Contract	

Technical Specifications

1 Electrical machinery apparatus equipment and consumables				
Sl. No.	Description of Goods	Particulars	Requirements	Bidder's Offer
1	Supply and Delivery of MFVRLA 110V 350 AH Battery Bank complete with all accessories Steel Rack & Connector complete set as per specification.	Attached in Document	Attached in Document	
2	Dismantle of existing battery bank	Attached in Document	Attached in Document	
3	Installation, Testing & Commissioning of MFVRLA 110V 350 AH Battery Bank	Attached in Document	Attached in Document	
4	spare battery (2 V per cell 350AH) MFVRLA	Attached in Document	Attached in Document	

Conditions of Contract

Section VI. General Conditions of Contract

1. Definitions	<p>1.1 In this contract, the following terms shall be interpreted as indicated:</p> <ul style="list-style-type: none">a. "The Contract" means the agreement entered into between the Purchaser and the Supplier, as recorded in the Contract Form Signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein;b. "The Contract Price" means the price payable to the Supplier under the contract for the full and proper performance of its contractual obligation;c. "The Goods" means Equipment and related Accessories and spare-parts or any other materials which the Supplier is required to supply to the Purchaser under the contract;d. "Services" means services ancillary to the supply of the goods such as transportation and insurance including the installation, commissioning and the operational and maintenance training of the supplied equipment.e. "The Purchaser" means the procuring entity purchasing the goods;f. "The Supplier" means the organization supplying the goods and services under this contract.
2. Technical Specification	<p>2.1 The goods supplied under this contract shall confirm to the standards mentioned in the Technical Specification.</p>
3. Patent Right	<p>3.1 The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of goods or any part thereof in the Purchaser's country.</p>

<p>4. Performance Security</p>	<p>4.1 Within seven days (7) of receipt of award of contract from the Purchaser, the successful Bidder shall furnish the performance security in the Performance Security Form provided in the Bidding Documents for the due performance of the Contract in the amounts specified in the SCC.</p> <p>4.2 Failure of the successful Supplier to comply with the requirement of Sub - clause 4.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the Purchaser may make the award to the next lowest Supplier or call for new sealed quotations.</p> <p>4.3 The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.</p> <p>4.4 The validity of Performance Security shall be the sum of delivery period, warranty period from the date of the issue of final acceptance certificate to the Supplier and additional one month.</p> <p>4.5 The performance security shall be released within 28 days of completion of warranty period and upon submission of claim by the Supplier.</p>
<p>5. Inspection and Tests</p>	<p>5.1 The Purchaser or its Representative shall have the right to inspect and/or test the goods to confirm their conformity to the Technical Specification and the quality of performance after the supply and delivery of good to the Purchaser's premises</p> <p>5.2 The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser.</p>
<p>6. Packing</p>	<p>6.1 The Supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transmit to their final destination as indicated in the contract.</p> <p>6.2 The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage.</p> <p>6.3 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided in accordance with international standard and practice.</p>
<p>7. Delivery of Goods</p>	<p>7.1 Delivery of the goods shall be made by the Supplier in accordance with the terms specified by the Purchaser in its Schedule of Requirements.</p>
<p>8. Insurance</p>	<p>8.1 The goods supplied under the contract shall be fully insured in the currency of the Sealed Quotation price against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified.</p>

<p>9. Warranty</p>	<p>9.1 The Supplier warrants that all the goods supplied under the contract shall fully comply with the specification laid down in the contract.</p> <p>9.2 Unless otherwise specified in the SCC, the warranty shall remain valid for one year after the goods have been delivered to the final destination indicated in the contract, and accepted by the Purchaser after installation and commissioning of equipment by the Supplier.</p> <p>9.3 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.</p> <p>9.4 Upon receipt of such notice, the Supplier shall, with all reasonable speed, replace the defective goods without cost to the Purchaser. The Supplier will be entitled to remove, at its own risk and cost, the defective goods.</p>
<p>10. Payment</p>	<p>10.1 Payment shall be made in the Nepalese currency as specified in the SCC</p> <p>10.2 Payment of the goods shall be made after the delivery and installation and commissioning of goods (if applicable) to the satisfaction of the Purchaser.</p>
<p>11. Prices</p>	<p>11.1 Prices charged by the Supplier for goods delivered under the contract shall not vary from the prices quoted by the Supplier in its sealed quotation.</p>
<p>12. Changed Order</p>	<p>12.1 Where the Purchaser desires to make changes in Schedule of Requirement, it shall not exceed more than 15 percent.</p>
<p>13. Liquidated Damages</p>	<p>13.1 If the Supplier fails to deliver any or all of the goods within the time period specified in the contract, the Purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.05 percent of the contract price of delayed goods for each day of delay until actual delivery, up to a maximum deduction of 10 percent of the delayed goods' contract price. Once the maximum is reached, the Purchaser may consider termination of the contract.</p>
<p>14. Resolution of Disputes</p>	<p>14.1 If any dispute or difference of any kind whatsoever shall arise between the Purchaser and the Supplier in connection with or arising out of the Contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.</p> <p>14.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or Supplier may give notice to the other party of it's intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.</p> <p>14.2.1 Any dispute or difference in respect of such a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be</p>

	<p>commenced prior to or after delivery of the Goods under the Contract.</p> <p>14.2.2 Arbitration proceedings shall be conducted in accordance with in accordance with the rules of Nepal Council of Arbitration (NEPCA).</p> <p>14.3 Notwithstanding any reference to arbitration herein,</p> <p>a. the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and</p> <p>b. the Purchaser shall pay the Supplier any monies due the Supplier.</p>
15. Governing Language	15.1 The Governing Language shall be: Nepali or English
16. Applicable Law	16.1 The applicable law shall be Laws of Nepal.
17. Notices	<p>17.1 Any Notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the SCC. The term “in writing” means communicated in written form with proof of receipt</p> <p>17.2 A Notice shall be effective when delivered or on the Notice’s effective date, whichever is later.</p>
18. Taxes and Duties	18.1 The Supplier shall be entirely responsible for all taxes, duties, licence fees and other such levies imposed by the GON.
19. Operation, Maintenance and Spare-parts Manuals	19.1 The successful Supplier shall supply manufacturer's operation, maintenance and spare-part manuals of the goods (Equipment) as specified in SCC..
20. Conduct of Suppliers	<p>20.1 The Supplier shall be responsible to fulfil his obligations as per the requirement of the Contract Agreement, Quotation documents, GoN’s Procurement Act and Regulations.</p> <p>20.2 The Supplier shall not carry out or cause to carryout the following acts with an intention to influence the implementation of the procurement process or the procurement agreement :</p> <p>a. give or propose improper inducement directly or indirectly,</p> <p>b. distortion or misrepresentation of facts</p> <p>c. engaging or being involved in corrupt or fraudulent practice</p> <p>d. interference in participation of other prospective bidders.</p> <p>e. coercion or threatening directly or indirectly to impair or harm, any party or the property of the party involved in the procurement proceedings,</p>

	<ul style="list-style-type: none"> f. collusive practice among bidders before or after submission of bids for distribution of works among bidders or fixing artificial/uncompetitive bid price with an intention to deprive the Purchaser the benefit of open competitive bid price.. g. contacting the Purchaser with an intention to influence the Purchaser with regards to the bid or interference of any kind in examination and evaluation of the bids during the period after opening of bids up to the notification of award of contract
<p>21. Blacklisting Supplier</p>	<p>21.1 Without prejudice to any right of the Purchaser under this Contract, the GoN, Public Procurement and Monitoring Office (PPMO) may blacklist a Supplier for his conduct up to three years on the following grounds and seriousness of the act committed by the supplier:</p> <ul style="list-style-type: none"> a. if it is proved that the supplier committed acts pursuant to the Sub - clause 20.2, b. if the supplier fails to sign an agreement pursuant to ITB Clause 24, c. if it is proved later that the supplier had committed substantial defect in implementation of the contract or had not substantially fulfilled his obligations under the contract or the completed work is not of the specified quality as per the contract , d. if convicted by a court of law in a criminal offence which disqualifies the supplier from participating in the contract. <p>21.2 A Supplier declared blacklisted and ineligible by the GON shall be ineligible to bid for a contract during the period of time determined by PPMO and credit information bureau of Nepal.</p>

Section VII - Special Conditions of Contract (SCC)

This SCC forms part of the Agreement

[Note: with the exception of the items for which the Purchaser's requirements have been inserted, the Bidder shall complete the following information before submitting his Sealed Quotation.]

GCC 1.1.1 (e) The Purchaser shall be: NEA, Devighat Hydropower Station

GCC 4.1 The Currency of of the performance Security shall be in Nepalese Rupees. The amount of the performance security shall be as follows:
 (i) if bid price of the bidder selected for acceptance is up to 15 (fifteen) percent below the approved cost estimate, the performance security amount shall be 5 (five) percent of the bid price.
 (ii) For the bid price of the bidder selected for acceptance is more than 15 (fifteen) percent below of the cost estimate, the performance security amount shall be determined as follows:
 (iii) Performance Security Amount = $[(0.85 \times \text{Cost Estimate} - \text{Bid Price}) \times 0.5] + 5\%$ of Bid Price.

 The Bid Price and Cost Estimate shall be inclusive of Value Added Tax.

GCC 9.1 The warranty period shall be : [12 months]

GCC 10 The terms of payment to be made to the Supplier under the contract shall be as follows: Through accounts division/unit of the Purchaser
 Payments shall be made in Nepalese Rupees in the following manner:
 On Delivery and acceptance: One Hundred (95)] percent. of the Contract Price of the Goods and related services delivered shall be paid within thirty (30) days of receipt of the Goods and related services (installation and commissioning of goods (if applicable)) to the satisfaction of the Purchaser. and upon submission of Tax Invoice and claim supported by the acceptance certificate issued by the Purchaser or its authorized person/s
 TDS shall be deducted as per the prevailing rules and regulations.

Payments shall be made in Nepalese Rupees in the following manner:.

SL No	Milestone Name	Payment Percentage
1	Advance payment	0
2	Delivery to site	95.0
3	Retention Amount	5.0

GCC 17.1 For notices, the Purchaser's address shall be:
 Attention: NEA, Devighat Hydropower Station
 Address: Bidur Nuwakot Bidur Nuwakot
 Designation:
 Telephone: 010560195 Facsimile Number:
 Electronic Mail Address:

GCC 17.1 For notices, the Suppliers's address shall be:
 Attention:
 Address:
 Designation:
 Telephone: Facsimile Number:
 Electronic Mail Address:

GCC 19.1	The Supplier shall supply [1]number of copies manufacturer's operation, maintenance and spare-part manuals of the goods (Equipment) in English or Nepali language as specified in SCC.
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Section VIII. Contract Form

1. Letter of Acceptance

[on letterhead paper of the Purchaser]

Date.....

To: (name and address of the Contractor)

Subject: Notification of Award

This is to notify that your Sealed Quotation dated for execution of the*name of the contract and identification number, as given in the Contract Data/SCC* for the Contract price of Nepalese Rupees *[insert amount in figures and words in Nepalese Rupees]*, as corrected in accordance with the Instructions to Bidders is hereby accepted in accordance with the Instruction to Bidders.

You are hereby instructed to contract this office to sign the formal contract agreement within 7 days. As per the Conditions of Contract, you are also required to submit Performance Security, as specified in SCC, consisting of a Bank Guarantee in the format included in Section VIII (Contract Forms) of the Bidding Document.

The Purchaser shall forfeit the bid security, in case you fail to furnish the Performance Security and to sign the contract within specified period.

Authorized Signature:

Name and Title of Signatory:

2. Contract Agreement

THIS AGREEMENT made the ____ day of _____ 20____ between *[name of Purchaser]* (hereinafter called “the Purchaser”) of the one part and *[name of Supplier]* of *[city and country of Supplier]* (hereinafter called “the Supplier”) of the other part:

WHEREAS the Purchaser invited Sealed Quotation for certain goods and ancillary services, viz., *[brief description of goods and services]* and has accepted a SQ by the Supplier for the supply of those goods and services in the sum of *[contract price in words and figures]* (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - a. Form of Agreement
 - b. The Purchaser’s Notification of Award
 - c. The General Conditions of Contract;
 - d. Special Conditions of Contract
 - e. Quotation Form and the Price Schedule submitted by the Supplier;
 - f. The Schedule of Requirements;
3. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

On behalf of the Purchaser

On behalf of the Supplier

Name:

Name:

Designation:

Designation:

Sign:

Sign:

Seal:

Seal:

3. Performance Security

Date :

To: *[name and address of the Purchaser]*

WHEREAS **[insert complete name of Supplier]** (hereinafter “the Supplier”) has received the notification of award for the execution of **[insert identification number and name of contract]** (hereinafter “the Contract”).

AND WHEREAS it has been stipulated by you in the aforementioned Contract that the Supplier shall furnish you with a security **[insert type of security]** issued by a reputable guarantor for the sum specified therein as security for compliance with the Supplier’s performance obligations in accordance with the Contract.

AND WHEREAS the undersigned **[insert complete name of Guarantor]**, legally domiciled in **[insert complete address of Guarantor]**, (hereinafter the “Guarantor”), have agreed to give the Supplier a security:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of **[insert currency and amount of guarantee in words and figures]** and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract, without cavil or argument, any sum or sums within the limits of **[insert currency and amount of guarantee in words and figures]** as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This security is valid until the **[insert day, month, year]**.

Name: **[insert complete name of person signing the Security]**

In the capacity of: **[insert legal capacity of person signing the Security]**

Signed: **[insert signature of person whose name and capacity are shown above]**

Duly authorized to sign the security for and on behalf of: **[insert seal and complete name of Guarantor]**

Date: **[insert date of signing]**

4. Bank Guarantee for Advance Payment

To: *[name of the Purchaser]*

[name of Contract]

Gentlemen and/or Ladies:

In accordance with the payment provision included in the Contract, which amends Clause 10 of the General Conditions of Contract to provide for advance payment, *[name and address of Supplier]* (hereinafter called “the Supplier”) shall deposit with the Purchaser a bank guarantee to guarantee its proper and faithful performance under the said Clause of the Contract in an amount of *[amount of guarantee in figures and words]*.

We, the *[bank or financial institution]*, as instructed by the Supplier, agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to the Purchaser on its first demand without whatsoever right of objection on our part and without its first claim to the Supplier, in the amount not exceeding *[amount of guarantee in figures and words]*.

We further agree that no change or addition to or other modification of the terms of the Contract to be performed there under or of any of the Contract documents which may be made between the Purchaser and the Supplier, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition, or modification.

The validity period of the guarantee shall be 30 days beyond the period scheduled for repayment of the advance payment and the guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until the Purchaser receives full repayment of the same amount from the Supplier.

Yours truly,

Signature and seal of the Guarantors

[name of bank or financial institution]

[address]

[date]

TECHNICAL SPECIFICATION OF BATTERY

GENERAL

This specification covers design, manufacture, assembly factory test, supply, delivery, installation works field test and commissioning of a **Maintenance Free Valve Regulated Lead Acid MFVRLA 110VDC 350 AH Battery Bank** complete with all accessories and rack as per specification.

The batteries shall be connected to the distribution board and battery charger. It shall be ensured that the 110V power supply system operates with both battery terminals free of earth.

2 EQUIPMENT TO BE FURNISHED

2.1 The following equipment shall be furnished in accordance with specification:

- a) **one set of 110 Volt 350 AH battery (55 NOS Cell, 2 V per cell 350 AH)**
- b) **cell connector, nut and bolt**
- c) **one (1) cell testing multimeter with leads**
- d) **Battery racks**

3 DESIGN REQUIREMENTS

3.1 BATTERIES

For the main 110V batteries Maintenance Free Valve Regulated Lead Acid type batteries shall be provided. Number the cells and mount on **racks of plastic-covered steel**.

The batteries shall be assembled in heavy-duty-steel designed for easy stack ability. The arrangement of the rack shall be such as to allow easy access and adequate space for normal maintenance in battery room. Suitably protect all battery stands against corrosion and attack by the battery electrolyte. Ensure that inter-cell connections are of low resistance in a clean condition when bolted and protected against corrosion. Ensure that the lowest rack for accommodating battery cells is at a minimum of 30 cm above ground level.

1. Battery sets:

A set of Battery shall consist of 55 nos. of cells, each cell with normal voltage of 2V in an individual container. The offered battery (Maintenance free valve regulated lead acid type) shall be totally maintenance free throughout the battery life and suitable for sub-station backup application. The batteries shall be of rugged construction, suitable for transportation.

2. Individual Cell Specification:

A unit, in which under normal operating condition the products of electrolysis are reconstituted within each individual gas tight cell, or unit and each cell or unit is fitted with a pressure release valve. The individual cell shall be enclosed type; each cell has normal voltage of 2 Volt.

3. Container:

The container material shall have chemical and electro-chemical compatibility and shall be acid resistant. The material shall meet all the requirements of VRLA batteries and be consistent with the life of battery. The container shall be secured against electrolyte leakage. The container shall be fitted with pressure releasing valve capable of preventing explosions. The tensile strength of the material of the container shall be such as to handle the internal cell pressure of the cells in the worst working conditions.

The container/lid shall carry the identification marks indicating.

1. Cell Type.
2. Ampere-hour capacity at Rate.
3. Month and year of manufacture and manufacturer's name.

4. Cell Lids/Covers:

The cell lids/Covers shall be made up of suitable plastic material compatible with the container material for heat sealing. They shall be secured against electrolyte leakage. The complete design shall include pillars to the lead seal which shall be designed to remain gas tight and electrolyte tight during the designed life of the cell. The container lid shall carry the identification of positive (+Ve) and (-Ve) terminal adjacent to the respective terminals.

5. Separators:

The Separators used shall be glass mat or synthetic material having high acid absorption capabilities, shall be resistant to sulphuric acid and shall have good insulating properties. The design of separators shall ensure that there is no misalignment during normal operation and handling.

6. Valve:

A Device which maintains a gas-tight and electrolyte-tight environment within a cell but doesn't allow pre-determined internal gas pressure to be exceeded. The valve shall be made up of suitable material. This shall be explosion resistant and self-releasing and Pressure regulating type.

7. Terminal post:

Positive and Negative post shall be clearly and unambiguously identifiable. The terminal construction shall provide air-tight sealing of the cell and prevent oxygen from getting in. The terminal post seal assembly shall be designed to remain gas tight and electrolyte tight.

8. External cell connector:

Connectors for individual cell connection (Series and Parallel) shall be maintenance free screw in insulated flexible cable of suitable length so that cell can be connected in any orientation (Horizontal/Vertical) with insulated

terminal covers.

9. Operating Temperature:

The offered batteries shall be designed for continuous full load operation under condition from 0° C temperatures up to 500 ° C.

10. Capacity:

The assigned capacity rating shall be expressed in ampere hours (after connection to 28 degree Celsius) stated by manufacturer to be obtained when the cell is discharged at 10 hours rate to the final discharge voltage of 1.83 V. The nominal float voltage shall be 2.25 V per cell.

11. Service life:

The offered batteries shall have minimum service life of 15 years and life cycle shall be Minimum of 1200 cycles at 80% depth of discharge, detail for 10, 20, 50% DOD (depth of discharge) shall be provided in on offer.

12. Battery stand:

The offered battery stand shall be of acid proof type and shall be designed such that it can be connected in the form of rack to stack the batteries in horizontal position.

13. Installation:

The offered batteries shall be designed to be installed in horizontal orientation. The installation materials for each battery sets shall be supplied complete in all respect including mounting racks, fixing accessories, cell connecting insulated screw in flexible cable, insulated terminal post covers, cables shoes, nuts and bolts etc. The suppliers shall do installation and testing.

3.1.1 BATTERIES CAPACITY SIZING

Battery nominal capacity shall be not less than 350 AH. The nominal voltage of the battery at its terminal shall be 110 V. Batteries shall be suitable for operation on a floating charge system and capable of providing the guaranteed output throughout the range of ambient conditions specified. Ensure that the battery rated output is that available at the outgoing terminals, after making due allowance for the resistance of inter cell connections.

The Contractor shall ensure that at the end of the rated discharge period, the voltage available at the terminals of the equipment being controlled shall not be less than the minimum operating voltage of the equipment being supplied.

The battery shall be rated for supplying total DC load of the substation. The duration of the load cycles shall be eight (6) hours. The total DC load cycle shall consist of the following:

0-1 minute: A- Simultaneous tripping of all breakers on under voltage. In case the circuit breakers charge after

tripping, starting current of the spring charged motor of all the above circuit breakers shall be considered for the entire 0-1 minute period:

- B- Emergency lighting load.
- C- Control, indication, protection and annunciation load.1 minute- 6 hours
Emergency lighting load
Control, indication, protection and annunciation load.

The battery capacity for 110 V Batteries shall not be less than 350 AH. 110 V Batteries need to be installed at Devighat Hydropower station substations

4. Tests

Type and routine tests at manufacturer's works and acceptance test at site shall be carried out on battery as per stipulation of latest standard of IEC.

The test shall include following tests.

- (a) General inspection.
- (b) Leakage test and internal short test for each cell.
- (c) One cell shall be type tested for discharge at ten hour rate to 1.85V DC at 25° After initial charging the following tests shall be performed at site:
 - (a) Capacity test.
 - (b) Efficiency test.

Test certificates shall be submitted to the Employer/Engineer for approval.

5. Drawing, Data and Manuals

The following drawings and details shall be furnished with the Tender:

- (a) Layout arrangement of battery in rack shown in the drawing.
- (b) Schematic and wiring diagram of Batteries
- (c) Cell voltage characteristic for battery
- (d) Technical leaflets on battery.

The following drawings and manuals shall be submitted by the successful Tenderer for approval:

- (a) Dimensional layout arrangement of battery
- (b) Dimensional outline drawing of battery
- (c) Instruction manuals of battery

Sn.	Specification of 110V DC Maintenance free Valve Regulated Lead Acid Battery	
1	type	Maintenance Free Valve Regulated Lead Acid
2	cell voltage:	2 Vdc per cell
3	Container and Cover:	Polypropylene Co-polymer
4	Separator:	Spun glass micro porous matrix
5	Safety valve:	Explosion-proof, pressure regulating and self-resealing type
6	Positive grid:	Long life corrosion resistant parented alloy
7	Negative grid:	Maintenance free alloy
8	Terminal:	Integral lead terminal with solid copper core
9	Self-Discharge:	Less than 1% per week
10	Charging:	Current limited, constant potential
11	Float Charge:	2.25VPC at 30 Deg C with a max. current limit of 20%of rated capacity in amperes
12	Boost Charge:	2.3VPC at 30Deg C with a max. current limit of 20%of rated capacity in amperes
13	Connectors:	Heavy-duty lead plated copper connectors
14	Design float life:	Not less than 5 years at 30 Deg C
15	cell Nominal Ah Capacity:	350Ah
16	Cabinet:	As recommended by supplier steel racks with plastic-cover
17	No. of Batteries:	Min. 55 Nos.
18	Applicable standard:	IEC , ISO

TECHNICAL DATA SHEET				
(To Be Completed By the Tenderer)				
<i>ITEM. 110V 350 AH MFVRLA Batteries</i>				
DESCRIPTIONS				
	DESCRIPTION	UNIT	NEA REQ	DATA to be filled
1	Type		Maintenance Free Valve Regulated Lead Acid	
2	Manufacturer and Country of Origin			
3	Container and Cover		Polypropylene Co-polymer	
4	Separator		Spun glass micro porous matrix	
5	Safety valve:		Explosion-proof, pressure regulating and self-resealing type	
6	Applicable standard		IEC/IS/ISO	
7	Nos. of Batteries	Nos.	55 Nos.	
8	DC output Voltage	V	110 V (each cell of 2V)	
9	cell voltage:	V	2 Vdc per cell	
10	Rated Capacity Ampere-Hour	Ah	350Ah	
11	Float charge	V	2.25 per cell	
12	Boost charge	V	2.30 per cell	
13	Terminal			
14	Self-Discharge	%	1< % per week	
15	rack		steel racks with plastic-cover	
16	Manufacturers Authorization Certificate in the letterhead of Manufacturers	to submit	to submit	
17	valid ISO 9001 certificate	to submit	to submit	
18	At least one, End User's certificate in the letterhead of end user. The Bidder shall submit the End user certificates showing that the manufacturer or bidder has successfully completed the supply of at least 2 set	to submit	to submit	

	of 110VDC Battery bank or of higher Volt as per specification of battery as a main supplier over last ten (10) years period ending on the last date of bid submission and shall have been in operation satisfactorily to the end users for at least One (1) year			
19	Product Catalogue, datasheet,	to submit	to submit	
Deviations from technical requirements:				
Signed As representative for				
Address Date				
.....				

NEPAL ELECTRICITY AUTHORITY
Devighat Hydropower Station
Bill of Quantity

Name of Bidder _____

Sealed Quotation no: NEA-DHPS-2081/82-ESQ-02

Job: Supply, Delivery, Installation, Testing & Commissioning of 110 VDC MFVRLA Battery Bank

s.n	Item	Unit	Qty	Unit rate	rate in words	Amount
1	Supply and Delivery of MFVRLA 110V 350 AH Battery Bank complete with all accessories Steel Rack & Connector complete set as per specification. (55 NOS Cell, 2 V per cell 350AH)	set	1			
2	Dismantle of existing battery bank	set	1			
3	Installation, Testing & Commissioning of MFVRLA 110V 350 AH Battery Bank	set	1			
4	spare battery (2 V per cell 350AH) MFVRLA	nos	10			
	Total Without VAT					
	VAT @13%					
	Grand Total					

Name

In the capacity of.....

Signed

Duly authorized to sign the Bid for and on behalf of

Date :.....