NEPAL ELECTRICITY AUTHORITY

(A Government of Nepal Undertaking)

Generation Directorate

Medium Generation, Operation and Maintenance Department

Modi Khola Hydro Power Station

Dimuwa, Parbat

SEALED QUOTATION

FOR

SUPPLY, DELIVERY, INSTALLATION, TESTING & COMMISSIONING OF 11 KV INDOOR VCB FOR INCOMER & 400/230 V ACB FOR INTERNAL DISTRIBUTION SYSTEM AT MKHPS

QUOTATION NO.: MKHPS-074/075-ES-SQ03

Last date and time of purchase	: 21st March 2018, office hours
Last date and time of submission	: 22nd March 2018, 12:00 noon
Quotation opening date and time	: 22nd March 2018, 14:00 hours

QUOTATION SUBMITTED BY: .....

(ON BEHALF OF): .....

Table of Contents

Section I. Invitation for Sealed Quotations 3

Section II. Instructions to Bidders.....4

Section III. Conditions of Contract.....11

Section IV. Schedule of Requirements 18

Section V. Technical Specifications.....19

Section VI. Sample Forms 28

A. Quotation Form
B. Price Schedule (Bill of Quantity)
C. Contract Agreement Form
D. Quotation Security Form
E. Performance Security Form
F. Manufacturer's Authorization Form
G. Declaration Form for E-bidding

ATTENTION!

ALL BIDDERS / SUPPLIERS ARE STRONGLY ADVISED TO READ ALL THE INSTRUCTIONS, CONDITIONS OF CONTRACT, TECHNICAL SPECIFICATIONS AND OTHER INFORMATION CLAUSE BY CLAUSE CAREFULLY AND THOROUGHLY BEFORE SUBMISSION OF THEIR SEALED QUOTATIONS TO THE PURCHASER.

EVEN IF ANY BIDDER / SUPPLIER FAILS TO DO SO, THE PURCHASER WILL ASSUME THEM READ AND THE BIDDER / SUPPLIER SHALL BE SOLELY RESPONSIBLE FOR ALL THE FORTHCOMING CONSEQUENCES DUE TO LACK OF KNOWLEDGE OF THE SEALED QUOTATION DOCUMENTS.

Bidders are requested to read the notice published on 2074/11/23 in The Rising Nepal as amended below for this particular package of Sealed Quotation:

Sealed Quotation No.:	**MKHPS-074/075-ES-SQ03**
Contract:	***"Supply, Delivery, Installation, Testing & Commissioning of 11 kV Indoor VCB for Incomer & 400/230 V ACB for Internal Distribution System at MKHPS"***

Section I. Invitation for Sealed Quotations

Sealed Quotation No. : **MKHPS-074/075-ES-SQ03**
Name of the Contract : ***Supply, Delivery, Installation, Testing & Commissioning of 11 kV Indoor VCB for Incomer & 400/230 V ACB for Internal Distribution System at MKHPS.***
Date of first Publication : 7th **March, 2018**

1. NEA, Modi Khola Hydropower Station (MKHPS), Dimuwa, Parbat invites wax Sealed Quotations from registered eligible Bidders for the **Supply, Delivery, Installation, Testing & Commissioning of 11 kV Indoor VCB for Incomer & 400/230 V ACB for Internal Distribution System at MKHPS.**
2. Interested eligible Bidders may obtain further information and inspect the Sealed Quotation Documents from the following offices.
3. A complete set of Sealed Quotation Documents in English may be purchased from the below offices during office hours **on or before 21st March, 2018** by interested Bidders on the submission of a written application accompanied by a bank voucher amounting to **Rs. 1,000/-** (non-refundable) towards the cost of the Sealed Quotation Documents deposited in MKHPS Depository **Account Number 1201017500027** maintained at Nabil Bank Limited, Pokhara Branch, Kaski, Nepal.
4. The local Bidders must produce a notarized copy of valid firm registration, the certificates of VAT & PAN registration and Income Tax Clearance Certificate at the time of purchase of the Sealed Quotation Documents. The local agents/bidders intending to purchase the Sealed Quotation documents on behalf of their principals must produce the authorization from their principals.
5. The Sealed Quotation document shall also be available on NEA website http://www.nea.org.np **or** http://www.e-nea.org.np. For those bidders who wish for e-bidding may obtain further information from either of these web sites.
6. All Quotations must be valid for a period of **forty five (45) days** after opening of the Sealed Quotations and must be accompanied by a Quotation Security (Bid Bond), amounting to not less than **NRs. 50,000/-** . The Bid Bond shall be in form of a Bank Guarantee drawn on a commercial Bank in Nepal in favor of NEA in the format provided in the Sealed Quotation Documents and shall be **valid for** at least **Seventy five (75) days** after opening of the Sealed Quotations.
7. If any bidder wishes to submit the Cash Security, the cash should be deposited in MKHPS Depository **Account Number 1201017500027** maintained at Nabil Bank Limited, Pokhara Branch, Kaski, Nepal and submit the receipt of the deposited amount of cash along with the Sealed Quotation Documents.
8. Sealed Quotation Documents must be submitted to the office of Modi Khola Hydropower Station (MKHPS), Dimuwa, Parbat no later than **12:00 hours (local time) 22nd March, 2018**. Quotations received after this deadline shall not be accepted. Alternatively, bidders may submit their bid electronically through e-procurement section in NEA website http://www.e-nea.org.np as specified in the ITB.
9. All Sealed Quotations shall be opened in the presence (or without presence) of bidder's representatives who choose to attend at the above office i.e. office of Modi Khola Hydropower Station (MKHPS), Dimuwa, Parbat, Nepal on the same day i.e. on **22nd March, 2018** at **14:00 hours (local time)**.
10. If the last day for purchasing, submission or opening falls on a government (public) holiday, the next working day shall be considered as the last day.
11. The Purchaser shall not be responsible for any costs or expenses incurred by Bidders in connection with the preparation or submission of Sealed Quotations.
12. The Purchaser reserves the right to accept or reject, wholly or partly any or all the Sealed Quotations or cancel the Sealed Quotations altogether, without assigning any reason, whatsoever.

	Modi Khola Hydropower Station (MKHPS) **Dimuwa, Parwat** **Tel./Fax No.: 067-410042**	**Medium Generation, Operation & Maintenance Department, NEA** **Ratna Park, Kathmandu** **Tel. No.: 01-4153081**

Section II. Instructions to Bidders (ITB)

1. Scope of Works

The Purchaser stated in the Invitation for Quotation invites Sealed Quotations for the **Supply, Delivery, Installation, Testing & Commissioning of 11 kV Indoor VCB for Incomer & 400/230 V ACB for Internal Distribution System at MKHPS** as detailed in attached Specifications and the bill of quantities provided herein.

2. Eligible Bidders

This Invitation for Bids is open to all registered Bidders with qualifications as described below:

a) Up to date Firm/Company Registration Certificate
b) VAT and PAN Registration Certificates
c) Tax Clearance Certificate 2073/074
d) Power of Attorney
e) Declaration letter
f) Experience letter showing that the bidder has worked for similar or related works
e) Other documents as needed

3. One Sealed Quotation per Bidder

Each Bidder shall submit only one Sealed Quotation. A Bidder who submits more than one Sealed Quotation shall cause all the Quotations with the Bidder's participation to be disqualified.

4. Content of Quotation Documents

The Quotation Documents comprise the Documents listed below:

a) Invitation for Sealed Quotations
b) Instructions to Bidders
c) Conditions of Contract (COC)
d) Form of Contract Agreement
e) Sample Forms
f) Schedule of Requirements
g) Technical Specifications

5. Clarification

A prospective Bidder may obtain clarification on the Quotation Documents from the Purchaser stated in Invitation for Sealed Quotations.

6. Language of Quotation

All Documents relating to the Quotation shall be in English or in Nepali.

7. Documents Comprising Quotation

The Quotation by the Bidder shall comprise the following:

a) Quotation and Price Schedules
b) Quotation Security
c) Schedule of Requirements
d) Technical Specifications

8. Quotation Prices

The Bidder shall indicate on the appropriate Price Schedule the unit prices (where applicable) and total price of the Goods to be supplied and delivered or Services to be provided under the Contract.

All duties, taxes and other levies payable by the Bidder under the Contract shall be included in the rates, prices and total Quotation Price submitted by the Bidder.

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.

9. Quotation Validity

The Quotation shall remain valid for the period of **Forty five (45) days** after opening of the Sealed Quotations.

10. Quotation Security

The Bidder shall furnish a Security in Nepali Rupees in the amount not less than **NRs. 50,000/-**. The Bid Security shall remain valid for a period of **Seventy five (75) days** after opening of the Sealed Quotations.

The Security shall be in the form of cash voucher deposited in the Bank Account of the Purchaser specified in the notice for "Invitation for Sealed Quotations" or in form of a Bank Guarantee drawn on a commercial Bank in Nepal in favor of the Purchaser in the format provided in the Sealed Quotation Documents.

11. Format and Signing of Quotations

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 initialed by the same authorized person.

12. Sealing and Marking of Quotations

The Bidder shall submit his Quotation in sealed envelopes. The envelope shall be addressed to the Purchaser specified in the Invitation for Sealed Quotations and shall bear the name and identification number of the Quotation.

13. Deadline for Submission of Quotations

Quotations shall be delivered to the Purchaser at the address no later than the time and date specified in the Invitation for Sealed Quotations.

14. Late Quotation

Any Quotation received by the Purchaser after the deadline shall not be accepted and shall be returned unopened to the Bidder upon request.

15. Modification and Withdrawal

Quotations once submitted shall not be withdrawn or modified.

16. Sealed Quotations Opening

The Purchaser shall open the Quotations in the presence (or without presence) of the Bidders' representatives who choose to attend at the time and in the place as specified in the Invitation for Sealed Quotations. The Purchaser shall prepare and provide minutes of the opening including the information disclosed to those present.

17. Process to be Confidential

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.

18. Examination of Quotations

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;

(c) is accompanied by the required Securities; and

(d) is substantially responsive to the requirements of the Sealed Quotation Documents

19. Evaluation and Comparison of Quotations

In evaluating the Quotations, the Purchaser shall determine for each Quotation the evaluated Bid 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:

(a) Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern; and

(b) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted shall govern.

If the Bidder does not accept the corrected amount, the Quotation shall be rejected and the Quotation Security Pursuant to Clause 10 may be forfeited.

The Purchaser reserves the right to accept minor variation or deviation provided that such variation or deviation doesn't affect the quality of the goods supplied or services rendered.

20. Rejection and Non-Responsiveness of Sealed Quotations

Sealed Quotations shall be **<u>rejected</u> as being non-responsive** (but not limited to) if:

a. All the information required by the Sealed Quotation document is not mentioned or falsely quoted.
b. The Sealed Quotation is conditional.
c. The proposed delivery or work completion schedule shows delivery or work completion dates more than the Purchaser's requirement.
d. The Sealed Quotation does not contain technical information and documents for major items required by the Specifications for Goods or services on which the Bidder is offering.
e. The offered Goods or services are not substantially in compliance with the Purchaser's Technical Specifications.
f. Necessary Qualification requirements of the Bidder as detailed in **Section V** of the Sealed Quotation documents are not met.
g. The description provided by the Bidders pertaining to the qualification is found to be false or is substantially

incomplete.

h. The Bidder does not offer all the items and quantity specified in the Price Schedule.

21. Award of Contract

The Purchaser shall decide the Award of the Contract, within **fifteen (15) days** of the opening of the Quotations, to the Bidder whose Quotation is within the approved estimate and who has offered the lowest evaluated Quotation Price among **substantially responsive** Bidders, provided that such Bidder has been determined to be eligible in accordance with the provisions of Clause 2.

Substantially Responsive Bidders are those who's offered Goods/Services **fully** comply with the Technical Specifications mentioned in the Sealed Quotation document and offered Schedule of Requirement (SOR) falls within the SOR of the Purchaser. This is verified on the basis of the submitted Catalogues/Brochures of the offered Goods or any other documents for the offered services by the Bidders.

22. Purchaser's Right to Accept or Reject

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.

23. Notification of Award and Signing of Agreement

The Bidder whose Quotation is accepted and all other participating bidders shall be notified of the Award by the Purchaser. Within **Seven (7) calendar days** of receipt of the notification, the successful Bidder shall deliver the Performance Security Pursuant to ITB Clause 24 and sign the Contract Agreement.

Inability of the Bidder to make a Contract Agreement within the above stated period shall result in cancellation of the Contract Award and forfeiture of the Bidder's Quotation Security, upon which the Contract shall then be awarded to the next successive successful Bidder.

24. Performance Security

The Criteria for Performance Security have been amended as per first amendment of Public Procurement Act, 2063. The details of amendment are as follows:

(a) If bid price of the bidder selected for acceptance is up to 15 (fifteen) percent less than the approved cost estimate, the performance security amount shall be 5 (five) percent of the Total Quoted Amount.

(b) For the bid price less than 15 percent of the cost estimate, the performance security amount shall be determined as follows:

Performance Security Amount = (0.85 × Cost Estimate - Bid Price) × 0.5 + 5% of Bid Price. The Bid Price and Cost Estimate shall be inclusive of VAT.

Special Instruction to Bidders for E-Bidding

A. Bid preparation:

(i) A Bidder who wishes to submit the Bid electronically can either purchase the Bid document directly from employer office as mentioned in tender notice or download from e-procurement section in NEA's web site http://www.e-nea.org.np.

(ii) The bid document downloaded from the NEA's website shall be submitted through e-bidding only.

B. Procedure of Bid submission through electronically (e-submission) only:

(i) In case, a Bidder wishes to download the Bid document from above website and also wishes to submit electronically, the Bid proposal, along with other requirements, must be accompanied by an electronically scanned copy of non-refundable bank voucher (as specified in the tender notice).

(ii) The Bidder shall fill the following documents and forms (in hard copy of issued bid documents) and it shall be signed by the notarized authorized representative and also stamped with the company's seal.

a) Bill of Quantity (BOQ) with rate, amount, b) Forms of Bid, Qualification Information & Certification Documents, c) Technical Data Sheet

The Bidder shall then scan the completed original documents, forms in PDF formats with appropriate file name shown in the table below.

S. No.	Document	PDF File Name	Requirement	Remarks
1	Form of Bid	Bid Form-1	Mandatory	
2	Bid Security (Bank Guarantee)	Bid Security-2	Mandatory	
3	Company Registration	Comp. Regis.-3	Mandatory	All firms in case of JV
4	VAT/PAN Registration	VAT Regist.-4	Mandatory for National Firms	All firms in case of JV
5	Tax Clearance Certificate	Tax-5	Mandatory for National Firms	All firms in case of JV
6	Power of Attorney of Bid Signatory	Power of Att-6	Mandatory	
7	Joint Venture Agreement	JV Doc-7	Mandatory	In case of JV
8	Qualification Information	Qualifications-8	Mandatory	As per ITB 10 & ITB 18, Section II, Catalogs / Brochures (as asked in Technical Data Sheet in Section V)
9	BOQ with Unit rate amount and Total Amount	BOQ-9	Mandatory	
10	Manufacturer's Authorization Letter	Authorization-10	Not Mandatory	As asked in Technical Specification under Section V
11	Technical Data Sheet	TDS-11	Mandatory	Submit the prepared sheet
12	Certification Documents	Certifications-12	Mandatory	
13	Declaration Form	Declaration-13	Mandatory	Submit the prepared form

*Note: **Mandatory** means the mentioned files shall be included in e-submission and non-submission of such file shall be considered as **non-responsive bid**.*

(iii) For e-submission purpose the Bidder shall, at first, register in the e-procurement section NEA's web site http://www.e-nea.org.np.

(iv) After preparing all the required bidding documents in PDF, scan the files as specified in (ii).

(v) The Bidder shall upload the PDF bid files and submit the complete bid online through e-procurement section of NEA's website http://www.e-nea.org.np within the specified date and time.

(vi) The e-procurement system will accept the e-submission of bid from the date after publishing of notice and will automatically disallow the e-submission of bid after the deadline for submission of bid, as specified above.

(vii) The standard time for e-submission is Nepalese Standard Time as set out in the server of MIS Department of NEA.

(viii) When a bidder submits his bid in hard copy, the e-procurement section does not allow the bidder to submit his Substitution or Modification or Withdrawal through e-procurement section of NEA's web site.

(ix) Bidders may submit his Substitution or Modification or Withdrawal either in hard copy or through e-submission.

(x) For Substitution of Bid, the Bidder shall follow similar steps as specified in ITB Clause -22 with a Substitution letter in PDF file.

(xi) For Modification or Withdrawal of bid, the Bidder is required to submit PDF scan copy of their Modification or Withdrawal letter and a written Power of Attorney of the signatory for Modification/ Withdrawal, duly signed by Authorized Representative/s of the Firm / all authorized Joint Venture partners.

(xii) When a Bidder submits electronic bid by downloading the bidding documents from the NEA's webpage it is assumed that the Bidder prepares his bid by studying and examining all the Bidding documents including specifications and conditions of contract.

(xiii) In case the Bidder choose to download the bidding documents and deposit the cost of bidding documents (as specified in the bid notice), such deposited amount shall be verified by the office during bid evaluation process. The bid shall be considered as non-responsive and shall not be evaluated if the specified cost for bidding document is not deposited in the Employer's Revenue account.

(xiv) Proposed facility for submission of bid electronically through e-submission is to increase transparency, non-discrimination, equality of access, and open competition. The Bidders shall be fully responsible to use the e-submission facility in e-procurement section of NEA's website http://www.e-nea.org.np in specified procedures and in no case the Employer shall be held liable for Bidder's inability to use this facility.

C. Requirements and Conditions for e-submission of bid:

(i) The Bidder shall submit his bid electronically in PDF files in the manner as specified above, and additional submission of hard copy of "original plus one copy of bid" is not mandatory.

(ii) In case, if both the electronic bid and original bid in hard copy are submitted to the Employer within the bid submission deadline, the Bidder's electronic bid and original bid in hard copy will be accepted for evaluation provided the facts and figures in hard copy confirm to the PDF files in electronic bid. If there is any discrepancy in fact and figures between the electronic bid and original bid in hard copy, it will be treated as two separate bids from one Bidder and hence, both the electronic bid and original bid in hard copy shall be disqualified. However, for electronically submitted bid in PDF files, the Bidder shall be required to submit documents/clarifications as specified in ITB clause within 3 days.

(iii) In case of e-submission of bid, the Bidder shall be required to submit the original completed Bid consisting of Forms of Bid, Qualification Information, Special Conditions of Contract, Bill of Quantities, Supplementary Information and other clarifications for verification purpose within 3 days from the date of bid opening at the office of the **Modi Hydropower Station, Dimuwa, Parbat.** In addition to electronically submitted PDF files, the Bidder shall be required to submit documents and clarifications as required by the Employer/Purchaser. Non-submission of such documents and or clarifications by the Bidder within specified time may cause forfeiture of Bid Security.

(iv) In case of major discrepancy found between electronically submitted PDF Bid files and documents/clarifications provided by the Bidder, the bid shall not be considered for further evaluation.

(v) The Bidder shall attach the Bid Security Guarantee in the format attached in the Bid Document. The Bid Security shall be forfeited if:

a. the Bidder does not respond to and/or submit the documents and or clarifications when requested by the Employer.

b. major discrepancy is found between e-submitted bid information and documents/clarifications provided by the Bidder during verification process as requested by the Employer.

D. Bid Opening process for e-submitted bid

(i) Electronically submitted bid shall be opened first at the Bid opening time.

(ii) The e-procurement system allows the Employer to download and open the e-submitted bid files from the bidders only after the time for opening the bids.

(iii) The e-submitted Bids must be readable through open standards interfaces. Unreadable and or partially submitted bid files (not complying with the ITB Clauses) shall be considered incomplete and rejected for further bid evaluation.

(iv) After opening of e-submitted bids files, all files shall be printed and recorded at the time of bid opening.

(v) In case of "WITDRAWAL" or "MODIFICATION" or "SUBSTITUTION" by the Bidder through e-submission, the e-submitted PDF files under "WITDRAWAL" or "MODIFICATION" or "SUBSTITUTION" shall be opened and read out first. Bids for which acceptable notice of "WITDRAWAL" or "SUBSTITUTION" has been submitted pursuant to ITB Clause shall not be opened.

E. Bid Evaluation and Comparison process for e-submitted bid

(i) In case of e-submitted bids, the Employer evaluates the bid based on the information as per electronically submitted bid files. For clarification/ verification purpose, the Employer may request the Bidder to submit documents/ clarifications.

(ii) In case, the Bidder could not substantiate or provide evidence to prove the information provided in e-submitted bid through documents/clarifications, the bid shall not be considered for further evaluation and respective ITB Clause for forfeiture of bid security shall be applicable.

F. Qualification Information

In case of e-Bidding, the Bidder is required to submit the documents to prove minimum qualification requirements only and not the detail documents.

G. **Bid Security Format:** Form of Bid security shall include the provision as 'This Bank Guarantee shall not be withdrawn or released merely upon return of the original Guarantee by the Bidder unless notified by the Employer for the release of the Guarantee.

Section III. Conditions of Contract (COC)

1. Definitions

1.1 In this Contract, the following terms shall be interpreted as indicated:

a. "The Contract" means the agreement entered 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 / Service Ptovider under the Contract for the full and proper performance of its contractual obligations;

c. "The Goods" means all of the Equipment and related Accessories, Spare-Parts, Machinery and/or any other Materials which the Supplier is required to supply to the Purchaser under the Contract and as mentioned in the Technical Specifications;

d. "Services" means those services ancillary to the supply of the Goods, such as transportation and insurance including repair, maintenance, erection, commissioning, technical assistance and the operational and maintenance training of the supplied Equipmnt and Machinery;

e. "The Purchaser" means the procuring entity purchasing the Goods and/or Services (in this Contract NEA, Modi Khola Hydropower Station); and

f. "The Supplier" means the organization supplying the Goods and/or Services under this Contract.

2. Technical Specifications

2.1 The Goods/Services supplied/provided under this Contract shall confirm to the standards mentioned in the Technical Specifications.

3. Patent Rights

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 the Goods or any part thereof in the Purchaser's country.

4. Performance Security

4.1 Within **seven (7) calendar days** of receipt of the notification of Contract Award, the successful Bidder shall furnish to the Purchaser the Performance Security in accordance with the Sub-Clause 4.3 of the Conditions of Contract in the Performance Security Form provided in the Sealed Quotation Documents.

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.

4.3 The Performance Security amount shall be as follows:

(a) If bid price of the bidder selected for acceptance is up to 15 (fifteen) percent less than the approved cost estimate, the

performance security amount shall be 5 (five) percent of the Total Quoted Amount.

(b) For the bid price less than 15 percent of the cost estimate, the performance security amount shall be determined as follows:

Performance Security Amount = (0.85 × Cost Estimate-Bid Price) × 0.5 + 5% of Bid Price. The Bid Price and Cost Estimate shall be inclusive of VAT.

4.4 The validity of Performance Security shall be one (1) year after the final installation and commissioning of the Goods/Services and the issue of final acceptance certificate to the Suppliers. The Supplier shall promptly extend the validity suitably to cover agreed extension of the warranty period of the supplied Goods/Services.

4.5 The Performance Security shall be released within **Twenty eight (28) calendar days** after the expiration of the validity of Performance Security and upon submission of claim by the Bidder.

5. Inspections and Tests after Delivery

5.1 The Purchaser or its Representative shall have the right to inspect and/or test the Goods/Services to verify their conformity to the Technical Specifications and their quality at **no** extra cost to the Purchaser after the Supply and Delivery of Goods/Services to the Purchaser's warehouse and after their testing & commissioning if applicable.

5.2 **Site Inspection and Supervision:**

a. After the complete consignment has been delivered and installed at Site, they shall be inspected at soonest possible time on the receipt of notification from the Supplier stating that the Goods are ready for inspection.
b. All the site activities such as site preparation, safety arrangements, tools, machines, equipment transportation performed by the Supplier shall be closely monitored and inspected by Engineers and/or Supervisors assigned by the Purchaser.
c. The Purchaser will not make any compromise for the quality of the Goods supplied and the Services performed by the Supplier. In order to maintain the quality of the works, appropriate instructions or suggestions may be given to the Supplier's site representative at any time during the works execution. The Supplier shall strictly obey the Purchaser's site representative's instruction to achieve the desired quality of the works.
d. If any part or whole of the works are to be inspected specifically, the Supplier shall inform the Purchaser's Site representative in advance providing the hard copies of the details of the inspection to be carried out, inspection and measurement plans, measurement formats, relevant drawings if any.
e. All the necessary tools, equipment, accessories and proper access associated with the inspection and measurements shall be made available by the Supplier.
f. If any defect is observed or any discrepancy or deviation from

the specifications in works is found during the inspection and measurement, the Supplier must make good the defects and correct the deviation before proceeding to the next step.

5.3 Nothing in **CoC Clause 5** shall in any way release the Bidder from any warranty or other obligations regarding specifications, quality and general terms under this Contract.

6. Packing

6.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract.

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.

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.

7. Delivery of Goods

7.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified by the Purchaser in the Schedule of Requirements.

7.2 The terms "EXW", "FOB", "CIF", "CIP" etc., shall be governed by the rules prescribed in the current edition of INCOTERMS published by the International Chamber of Commerce (ICC), Paris.

8. Insurance

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.

8.2 Where delivery of the Goods is required by the Purchaser on a CIF or CIP basis to a specified destination, the Supplier shall arrange and pay for insurance, naming the Purchaser as the beneficiary and the Supplier shall be required to meet all transport and storage expenses until delivery.

9. Warranty

9.1 The Bidder warrants that all the Goods/Services supplied under the Contract shall **fully** comply with the Specifications laid down in the Contract.

9.2 The warranty shall remain valid for **one (1) year** after the Goods/Services have been delivered to the final destination indicated in the Contract, and accepted by the Purchaser after the installation and commissioning of equipment or spare parts by the Supplier / Service Provider.

9.3 The Purchaser shall promptly notify the Bidder in writing of any such claims arising under this warranty.

9.4 Upon receipt of such notice, the Bidder shall, with all reasonable speed, replace the defective Goods and rectify the defects caused in the delivered items without cost to the Purchaser. The Bidder will be entitled to remove the defective Goods and rectify such defects, at its own risk and cost.

10. Payment

10.1 **No** advance payment shall be made to Bidder according to this Contract.

10.2 Payment shall be made in the currency in which the Contract price has been stated in the Supplier's Sealed Quotation after the Supply and Delivery of Goods/Services at the Purchaser's warehouse and successful completion of the Installation, Site Inspection and Testing (**Pursuant to CoC Clause 5**) of the delivered Goods/Services or installed equipment to the satisfaction of the Purchaser.

10.3 The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered, Service provided, Inspection, Testing & Commissioning carried out at Site, and by supporting documents and upon fulfillment of other obligations stipulated in the Contract. Following supporting documents must be submitted at the time of requesting payments:

- Original Invoice with stamp
- Payment request letter
- Document showing receipt of the Goods/spare parts by the Purchaser

10.4 Payments shall be made by the Purchaser as follows:

(a) Ninety-Five (95%) percent of the invoice value will be paid after certification by the Purchaser that all Goods invoiced has been delivered at the appropriate warehouses of the Purchaser in good condition and Service successfully completed after deducting Advance Income Tax as per the prevailing rule of GoN; and

(b) Five (5%) percent of the invoice value of the Contract amount shall be withheld as retention. The retention thus held shall be paid after the expiry of the warranty period and/or upon submission of tax clearance certificate by the Bidder.

11. Prices

11.1 Prices charged by the Bidder for Goods/Services delivered under the Contract shall not vary from the prices quoted by the Bidder in its Sealed Quotation.

12. Changed Order

12.1 Where the Purchaser desires to make changes in **Schedule of Requirements**, it shall not exceed more than **fifteen (15%) percent**.

13. Liquidated Damages

13.1 If the Bidder fails to deliver any or all of the Goods/Services 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/Services for each day

of delay until actual delivery, up to a maximum deduction of **ten (10%) percent** of the delayed Goods'/Services Contract price. Once the maximum is reached, the Purchaser may consider termination of the Contract.

14. Resolution of Disputes

14.1 If any dispute or difference of any kind whatsoever shall arise between the Purchaser and the Bidder 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.

14.2 If, after **thirty (30) calendar 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.

(a) 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 commenced prior to or after delivery of the Goods/Services under the Contract.

(b) Arbitration proceedings shall be conducted in accordance with the rules of Nepal Council of Arbitration (NEPCA).

14.3 Notwithstanding any reference to arbitration herein,

(a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and

(b) the Purchaser shall pay the Bidder any monies due the Bidder.

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

17.1 Purchaser's address for notice purposes:

Modi Khola Hydropower Station (MKHPS), Dimuwa, Parbat, Nepal, Tel./Fax No. 067-410042.

17.2 Supplier's address for notice purposes:

……..……

18. Taxes and Duties

18.1 The Bidder shall be entirely responsible for all taxes, duties, licence fees and other such levies imposed by the GoN until the delivery of the contracted Goods/Services to the Purchaser.

19. Operation, Maintenance and Spare

19.1 The successful Bidder shall supply one (1) copy of manufacturer's Operation, Maintenance and Spare-Parts manuals of the Goods in case of Supply and Delivery being any Equipment.

Parts Manual

20. Conduct of Bidders

20.1 The Bidder shall be responsible to fulfill his obligations as per the requirements of the Contract Agreement, Sealed Quotation Documents, GoN's Procurement Act as well as NEA rules and Regulations.

20.2 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 impair or harm, any party or the property of the party 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,

(g) contacting the Purchaser with an intention to influence the Purchaser with regards to the bids or interference of any kind in examination and evaluation of the bids during the period after opening of the bids until the notification of award of Contract.

21. Blacklisting Supplier

21.1 Without prejudice to any other rights of the Purchaser under this Contract, the GoN, Public Procurement Monitoring Office (PPMO) may blacklist a Bidder for his conduct up to three years on the following grounds and seriousness of the act committed by the Supplier:

(a) if it is proved that the Bidder committed acts Pursuant to the COC Sub-Clause 20.2,

(b) if the Supplier fails to sign an Agreement Pursuant to ITB Clause 23,

(c) if it is proved later that the Bidder 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 bidder from participating in the Contract,

21.2 A Bidder declared blacklisted and ineligible by the GoN, Public Procurement Office and NEA shall be ineligible to bid for a Contract during the period of time determined by the PPMO.

22. Extension of Time	21.1 If at any time during performance of the Contract, the Bidder should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's/Service Provider's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of Contract.
23. Site Visits, Installation & Associated Costs	**SITE VISITS:** 23.1 All Bidders are strongly recommended to make Site Visit and assess the area of installation of the said Switchgear Equipment prior to submit their Bids in order to incorporate all associated Costs. Even if any Bidder fails to make Site Visit properly, NEA will assume them as visited and the bidder shall be solely responsible for all the forthcoming situations due to lack of proper Site knowledge. **SITE PREPARATION:** 23.2 All equipment, machines, materials, supplies associated with the execution of the said Installation works must be made available by the Supplier. **POWER SUPPLY:** 23.3 Power supply required for the demonstration or execution of the works shall be made available by the Purchaser to certain electrical panel board. However, required connecting cables, cable, connectors, extension cords and other required electrical accessories shall be arranged by the Supplier himself. **EQUIPMENT:** 23.4 Equipment required for complete installation, testing and commissioning of the said Switchgear Equipment shall be arranged by the Supplier with **no** additional cost to the Purchaser. The mobilization and transportation of the said equipment to and around the working area shall be carried out by the Supplier himself.

Section IV. Schedule of Requirements

The delivery schedule expressed as days stipulated hereafter a delivery date which is the completion date of **Supply, Delivery, Installation, Testing & Commissioning of 11 kV Indoor VCB for Incomer & 400/230 V ACB for Internal Distribution System at MKHPS** to the Modi Khola Hydropower Station (MKHPS), Dimuwa, Parbat.

A. Work Completion Schedule Required by the Purchaser:

S. No.	Description	Qty	Work Completion Schedule in days after Signing of Contract Agreement
1	Supply, Delivery, Installation, Testing & Commissioning of 11 kV Indoor VCB for Incomer & 400/230 V ACB for Internal Distribution System at MKHPS	1 (One) Lot	3 (Three) Months

B. Work Completion Schedule Proposed by the Bidder:

S. No.	Description	Qty	Work Completion Schedule in days after Signing of Contract Agreement
1	Supply, Delivery, Installation, Testing & Commissioning of 11 kV Indoor VCB for Incomer & 400/230 V ACB for Internal Distribution System at MKHPS	1 (One) Lot	..……Months

Signature: ……..……..

As Representative for: ……..……..

Address: ……. Date: ……

Section V. Technical Specifications

A. GENERAL

Nepal Electricity Authority (NEA), Modi Khola Hydro Power Station (MKHPS), Dimuwa, Parbat, intends to procure and install **11 kV Indoor Vacuum Circuit Breaker (VCB) for Incomer and 400/230 V Indoor Air Circuit Breaker (ACB) for Internal Distribution System** through Sealed Quotation process for 11 kV local feeder main incomer at switchgear room and 400 V internal distribution board at Generator Floor both located within powerhouse premises.

This specification covers the design, manufacture, assembly, shop test, supply delivery, installation work, field test and commissioning of Indoor CBs complete with all accessories for efficient and trouble free operation as specified herein under. The manufacturers company for the CBs must be ISO certified.

Due to safety concern, of the switchgear equipment, the 11 kV VCB shall be accepted only from the reputed and renowned manufacturer such as **ABB, AREVA, ALSTOM, Crompton Greaves Ltd., Hitachi, Siemens, Toshiba, Mitsubishi, Fuji or GE**. The local brand of the VCB shall not be accepted in any case. Apart from this, the supplier shall offer the VCB which is compatible to the existing one for that they may take necessary consult and discussion with technical personals of MKHPS.

B. SCOPE OF WORK

The Scope of work under this section covers design, manufacture, supply, delivery, installation, testing and commissioning of 11 kV Indoor VCB and 400/230 V Indoor ACB. The equipment specified in this section shall conform to the latest edition of the appropriate IEC specifications and/or other recognized international standards. In particular:

IEC 60056	High-voltage alternating switchgear
IEC 62271	High-voltage alternating switchgear and control gear
IEC 60529	Degree of protection provided by enclosure
IEC 60947	Low Voltage Switchgear and Control gear
IEC 60298	A.C metal-enclosed switchgear and control gear for rated voltage above 1 kV

Also, other IEC standards related to Low Voltage and Medium voltage switchgears, control and protections are acceptable. Any other code recognized in the country of origin of equipment might be considered provided that they fully comply with IEC standard.

Bidders shall not make any changes in the existing electrical system. Purchaser reserve the right to decline the acceptance of the Goods/Services, to its own judgment, if the Goods are not found suitable for their intended use.

C. DESIGN REQUIREMENTS

The circuit breakers shall be suitable for 3 phase, 50 Hz and shall be installed indoor inside powerhouse as well as switchgear room. All the equipment and accessories shall be provided with sub-tropical finish to prevent fungus growth.

The maximum temperature rise in any part of the equipment at specified rating shall not exceed the permissible limits as stipulated in relevant standard.

The rated peak short circuit current or the rated short time current carried by the equipment shall not cause:

a) Mechanical damage to any part of the equipment
b) Separation of contacts
c) Insulation damage of "Current Carrying Part"

Technical specifications of the CBs shall be as specified here in the section technical particulars. All auxiliary equipment shall be suitable for 3-phase 4 wires, 400 V, 50 Hz system. All control shall be suitable for 110 V DC.

D. CONSTRUCTION FEATURES

The circuit breaker shall be indoor, 3-phase, (single- throw) spring charged motor operated, trip - free in any position, complete with operating mechanism and supporting structure.

The 11 kV circuit breaker shall be of Vacuum type, whereas 400 V circuit breaker shall be of Air Type.

This 400/230 V ACB must be electrically interlocked with another ACB of same voltage rating, so that they operate in complement i. e. opening of the one must drive to close another CB and vice versa.

Reclosing operation

The circuit breaker for outgoing / incoming line for voltage level above 11 kV, or 400 V for respected CBs shall be capable of making reclosing operation.

Contacts

The contacts shall be designed to have adequate thermal and current carrying capacity for carrying full-rated current without exceeding the allowable temperature rise as specified by IEC standards. They shall be designed to have long life so that frequent replacement or maintenance will be unnecessary. The surfaces of either of both moving and stationary arcing-contacts that are exposed directly to the arc shall be faced with suitable arc resisting material.

Vacuum Interrupter for VCB

Vacuum interrupter, which makes use of the excellent dielectric properties, should confirm to obtain a highly reliable extinguishing device such as to quench the arc as soon as possible without causing the visible formation of the arc. There should not be any deterioration of the quenching medium. The design and manufacturing technology of the interrupter should ensure the vacuum integrity. The recovery should be faster and hence the arc quenching should be accomplished within the adequate contact gap to support the required rating. The contact surface should be free of impurities and pollution layers. Materials of high conductivity should be used such that the contact resistance will be very low. During switching, the Breaker should be **re-strikes free.**

Arc Chamber for ACB

Arc Chamber shall be made such that there should not be any deterioration of the quenching medium, main contacts, auxiliary contacts, arch chutes, puffer etc. during interruption and making circuit within specified limits. Air medium should confirm to obtain highly reliable extinguishing medium. The main contact closing pressure should be as high as possible so that temperature rise at main contact does not exceed permissible limit. It should operate safely and reliably up to rated breaking current and making current during breaking and making circuit for at least rated number of operations.

Local Test Switch

Each mechanism shall be equipped with a local test switch for electrically testing the closing and tripping operations of the circuit breaker. A separate manually operated cut-out device to disconnect the circuits from remote closing, reclosing and tripping devices shall be provided on each circuit breaker. A warning nameplate requiring operation of this device before operation of

the local test switch shall be mounted adjacent to the local test switch.

Emergency Trip

Each circuit breaker shall be provided with an emergency hand trip device. This device shall be provided with mechanically interlocked contacts to disconnect circuits from remote closing and reclosing devices. The trip button shall be mounted in such a way that it can be operated from outside of the operating box.

Position Indicator

The circuit breaker shall be equipped with easily visible mechanical position indicator. The indicator shall be provided for each pole.

Tripping Circuit

Two (2) sets of tripping coils shall be provided in two separate current and magnetic circuits in order to make possible primary and backup tripping of circuit breaker. Provision for trip circuit supervision shall be provided.

The tripping circuit mechanism and the closing control circuit mechanism shall each have a nominal voltage rating of 110 volts DC. The tripping circuit shall operate satisfactorily for a tripping operation over a voltage range of 70-110%. The closing control circuit shall operate satisfactorily over a voltage range of 85-110%.

Motor-operated Spring-Charged Mechanism

A complete and separate spring-operating system shall be furnished and installed to operate the circuit breaker. Closing action of breaker shall charge the opening spring for tripping. Each operating mechanism shall be provided with a spring charging motor with a common control cabinet.

- The time required to charge the closing spring after the closing operation shall not exceed 30 seconds.
- Under voltage alarm relay suitable for operation on DC circuit to permit remote indication of loss of potential on the AC to the control gear.
- Spring charged indicator shall indicate the state of energy store in the spring. Indication for fully charged spring shall be provided both at local and remote control panel.
- Means shall be provided to prevent the operation of the mechanism when maintenance work is being done. The mechanism shall be so arranged that emergency manual charging and release of the spring is possible without electrical means. One (1) complete operation shall be possible after failure of power supply.

Operating Cubicle

Circuit breaker operating mechanisms, auxiliary switches and associated relays, control switches, control cable terminations, and other ancillary equipment shall be housed in sheet steel vermin-proof and weatherproof cubicles. The enclosure protection of the cubicle shall be IP55W. Where appropriate, the cubicles may be free standing with front and rear access.

Cubicles shall be of rigid construction, preferably folded but alternatively formed on a framework of standard rolled steel sections and shall include any supporting steel work necessary for mounting on the circuit breaker or on concrete foundations. The thickness of the sheet steel shall be at least 2 mm. All fastenings shall be integral with the panel or door and provision made for locking. Doors shall be rigid and fitted with weatherproof sealing materials suitable for the climatic conditions specified.

Cubicles shall be well ventilated thorough vermin-proof louvers comprising a brass gauze-screen attached to a frame and secured to the inside of the cubicle. Divisions between compartments

within the cubicle shall be perforated to assist air circulation. In addition, thermostat- controlled space heater with ON-OFF switches rated 230 V, 1 phase, 50 Hz shall be provided to prevent condensations within the cubicle.

A local control switch connected with a remote-local selector switch shall be furnished and wired in the control circuits of the breaker. The local control switch shall be operative from within the operating cubicle only when the selector switch is in local position.

Accessories

The Supplier shall furnish all required accessories as an integral part of each circuit breaker as per standard manufacture.

E. TESTS

Routine Tests

On completion each circuit breakers shall be subjected to following routine tests. As far as practical, the procedure of IEC shall be followed:

a. Leakage Test
b. Operating Speed Check
c. Dielectric test
d. Control and secondary wiring check test
e. Mechanical operation test
f. Operating mechanism system check
g. Voltage withstand test on auxiliary circuits
h. Measurement of resistance of main circuit of each pole
i. Power frequency voltage withstand test on main circuit of each pole and the combination of poles and breaker frame.

Design Tests

Following design tests shall be performed on the offered model. The circuit breaker design tests shall include following:

a. Dielectric withstand test
b. Temperature rise test
c. Radio interference voltage test
d. Short-time withstand current and peak withstand current tests
e. Verification of the protection
f. Electromagnetic compatibility tests
g. The Bidder shall submit copy of design test report from recognized testing laboratory for the circuit breaker of the offered model at the time of drawing approval.

Field Tests

After installation at Site, the circuit breaker shall be subjected to the following field tests:

a. Construction inspection
b. Measurement of insulation resistance of main and auxiliary circuits
c. Operating speed check
d. Mechanical operation test
e. Operating mechanism system check
f. Anti-pumping test

F. PERFORMANCE GUARANTEE

The performance guarantee figures quoted on the schedule of Technical Data shall be guaranteed within the tolerances permitted by relevant standard and will become a part of successful Bidder's Contract.

G. DRAWINGS, DATA AND MANUAL

The outline drawings of the breaker and control cubicle with accessories shall be furnished along with the Sealed Quotation document.

After award of Contract, the successful Bidder shall submit the required number of copies of the following drawings and data for getting approval of the Purchaser.

a. General equipment layout
b. Outline drawings of the breaker and control cubicle with accessories
c. Loading data and foundation detail
d. Elementary control wiring diagrams
e. Internal wiring diagrams
f. External connection diagrams, showing terminal boards and other external Connection points for each assembly and the required interconnecting wiring
g. Drawings showing typical cross-sections of the operating mechanism and the breaker mechanism
h. Drawings showing typical cross-section and assembly of interrupting device
i. Drawings showing assembly of principal component parts and accessories
j. Drawings showing details of bushings or porcelain supporting columns, including dimension details of flanges and outline dimensions
k. Drawing to show details at all points where adjustments may be made to operating dimension mechanism, breaker mechanism and contact
l. Any other drawings and data required for design and installation of circuit breaker.
m. Instruction manual for storage, installation, operation and maintenance of circuit breaker and operating mechanism.

H. NAMEPLATE

Circuit breaker shall be provided with a nameplate of weather-resistant material fitted in a visible position. It shall show the main features / information of the CB as per manufacturer’s standard.

(a) Circuit Breaker (Note: Circuit breaker and operating cubicle nameplates may be combined)

(b) Operating cubicle (Note: Operating cubicles and circuit breaker nameplates may be combined.)

I. GENERAL TOOLS

The Bidder shall furnish a complete set of General Tools which are usually provided from the manufacturers along with such breakers, for assembling and disassembling the CBs.

TECHNICAL PARTICULARS OF 11 KV INDOOR VACUUM CIRCUIT BREAKER

1	Type	Indoor / Draw-out
2	Rated Voltage	12 kV
3	Rated Frequency	50 Hz
4	**Insulation Level**	
	a. Rated Power Frequency Withstand Voltage (1- Min)	42 kV
	b. Rated Lighting Impulse Withstand Voltage (Peak)	75 kV

5	**Current Rating**	
	a. Rated Nominal Current	1250 A
	b. Rated Short Circuit Breaking Current	25 kA
	c. Rated Short Circuit Making Current	62.5 kA
	d. Rated Short Time Withstand Current (3 sec)	25 kA
	e. Rated Peak Withstand Current	62.5 kA
6	Operating Sequence	O-0.3s-CO-180s-CO
7	Operation	Three Pole Operation Type
8	Auxiliary Supply	
	a. Control Circuit	110 V DC
9	Power Supply For Energy Storing Motor	110 V DC
10	Average Closing Speed	0.5 - 1 m/s
11	Average Opening Speed	1 -1.3 m/s
12	Contact Closing and Tripping Time	< 2 ms

TECHNICAL PARTICULARS OF 400/230 V INDOOR AIR CIRCUIT BREAKER

1	Original Manufacturer / Model	LG / LBA-06S-4ESA
2	Type	Indoor
3	Voltage Rating	
	a. Nominal System Voltage	400 V
	b. Rated Maximum Voltage	690 V
4	Insulation Level	
	a. Rated Insulation Voltage	100 V
	b. Rated Impulse withstand Voltage	12 kV
5	Frequency	50 Hz
6	Current Rating	
	a. Rated Current	630 A
	b. Rated Breaking Capacity	65 kA
	c. Rated Making Capacity	143 kA (peak)
7	Number of Poles	4
8	Category	B
9	Rated Short Time Withstand Current	
	a. For 1 sec	≥ 50 kA
	b. For 2 sec	≥ 42 kA
	c. For 3 sec	≥ 36 kA
10	Operating Time	
	a. Maximum total Breaking Time	40 mS
	b. Maximum total Making Time	80 mS
11	Life Cycle (Without Maintenance)	
	a. Electrical	Not Less than 5000 time
	b. Mechanical	Not Less than 20000 time
12	Connection	Horizontal Fixed Type
13	Springing Charging Type	Motor Charging and Manual Charging Both provided

14	Interlocking Provided	
	a. Electrical	Both Provided
	b. Mechanical	
15	External Dimension(H mm × W mm × D mm)	Approx. 300 × 385 × 295
16	Weight	≥ 34 kg

TECHNICAL DATA SHEET
(To Be Completed By the Bidder)
Item No. 1: 11 kV INDOOR VACUUM CIRCUIT BREAKER

S. No.	Description	Unit	NEA Requirement	Data to be Filled by the Bidder
1	Manufacturer and Country of Origin			
2	Year of manufacturing experience	Years	10	
3	Manufacturing's Designation as per submitted catalogue			
4	Applicable standard		IEC	
5	Type		Vacuum CB Outdoor	
6	Poles		Three pole	
7	Local and remote operations		Both Required	
8	Rated Voltage	kV	12	
9	Rated Frequency	Hz	50	
10	**Current Rating**			
10.1	Rated Nominal Current	A	1250	
10.2	Rated Short Circuit Breaking Current	kA	25	
10.3	Rated Short Circuit Making Current	kA	62.5	
10.4	Rated Short Time Withstand Current (3 sec)	kA	25	
10.5	Rated Peak Withstand Current	kA	62.5	
11	Operating Sequence		O-0.3s-CO-180s-CO	
12	Temperature rise above 45 ^{0}C ambient		As per IEC	
13	Average Opening Speed	m/s	0.5-1	
14	Average Closing Speed	m/s	1-1.3	
15	Contact Closing and Tripping Time	ms	< 2	
16	**Insulation level**			
16.1	Impulse withstand voltage(crest)	kV	75	
16.2	Power frequency withstand voltage	kV	42	
17	Mechanical Life	Times	20000	
18	Clearance Between Contacts	mm	9 ± 1	
19	Pole Centre Distance	mm	170-210	
20	Allowable Maximum Contact Erosion	mm	3	
21	Vacuum Chamber			
21.1	Make	kA	62.5	
21.2	Rating	A	1250	
22	**Operating Mechanism**			
22.1	Type		Spring operated	
22.2	Operating voltage of closing and tripping coil	V DC	110	
22.3	Operating voltage range	% of rated voltage		
	-Closing		85-110%	
	-Tripping		70-110%	
22.4	Closing and tripping current	A		
22.5	Spring charging motor rating			
	-Capacity	kW	~0.3	
	-Rated voltage / Frequency	V / Hz	110V DC/50	
22.6	Energy storing period under rated operation	Sec	<10	

	voltage (s)			
22.7	Push button for local operation	Yes/No	Yes	
22.8	Selection switch for local/remote control	Yes/No	Yes	
23	Anti-pumping device provided	Yes/No	Yes	
24	Trip-free feature provided	Yes/No	Yes	
25	Operation counter provided	Yes/No	Yes	
26	Space heater provided for cubicle	Yes/No	Yes	
27	Number of auxiliary contacts	No.	8NO, 8NC	
28	Padlocking provision for cubicle	Yes/No	Yes	
29	Total weight of the circuit breaker	Kg		
30	Mechanical dimension (L×W×H)	mm × mm × mm		
31	Delivery of Equipment, Installation, Testing & Commissioning following Contract Award (Allowing time for approval of drawing)	Days	90	
32	Is manufacturer ISO 9001 holder?	Yes/No	Yes	
33	ISO 9001 certificate submitted?	Yes/No	Yes	
34	Has manufacturer exported units?	Yes/No	Yes	

TECHNICAL DATA SHEET

(To be Completed by the Tenderer)

Item No. 2: 400/230 V INDOOR AIR CIRCUIT BREAKER(ACB)

S. No.	Description	Unit	NEA Requirement	Data To be Filled by the Bidder
1	Manufacturer and Country of Origin			
2	Year of Manufacturing Experiences	Years	> 10	
3	Manufacturing's Designation as per submitted catalogue			
4	Applicable standard		IEC	
5	Type		Indoor ACB	
6	Local and Remote Operation		Both Required	
7	Voltage Rating			
	a. Nominal System Voltage	V	400	
	b. Rated Maximum Voltage	V	690	
8	Insulation Level			
	a. Rated Insulation Voltage	V	1000	
	b. Rated Impulse withstand Voltage	kV	12 kV	
9	Frequency	Hz	50 Hz	
10	Current Rating			
	a. Rated Current	A	630 A	
	b. Rated Breaking Capacity	kA	65 kA	
	c. Rated Making Capacity	kA	143 kA (peak)	
11	Number of Poles	No.	4	
12	Category		B	
13	Rated Short Time Withstand Current			
	a. For 1 sec	kA	≥ 50 kA	
	b. For 2 sec	kA	≥ 42 kA	
	c. For 3 sec	kA	≥ 36 kA	
14	Operating Time			
	a. Maximum total Breaking Time	mS	40 mS	
	b. Maximum total Making Time	mS	80 mS	
15	Life Cycle (Without Maintenance)			

	a. Electrical	Times	Not Less than 5000 time	
	b. Mechanical	Times	Not Less than 20000 time	
16	Connection		Horizontal Fixed Type	
17	Springing Charging Type		Motor Charging and Manual Charging Both provided	
18	Interlocking Provided			
	a. Electrical		Both Provided	
	b. Mechanical			
	Padlocking Provision for Cubical	Yes/No	Yes	
19	External Dimension (H mm × W mm × D mm)		Approx. 300 × 385 × 295	
20	Weight		≥ 34 kg	
21	Delivery of Equipment, Installation, Testing & Commissioning following Contract Award (Allowing time for approval of drawing)	Days	90	
22	Is manufacturer ISO 9001 holder?	Yes/No	Yes	
23	ISO 9001 certificate submitted?	Yes/No	Yes	
24	Has manufacturer exported units?	Yes/No	Yes	

Necessary Qualification of the Bidder:

In order to make the Sealed Quotation substantially responsive in all respect, the Bidder must fulfill the following requiremets. Failure to fulfill these requirements may cause rejection of the Sealed Quotation.

- *The CBs manufacturers must be ISO 9001 certified company and must have experience of at least **Ten (10) yrs**. for manufacture of similar products.*
- *The Bidder must submit valid ISO Certificate and Authorization Letter from the manufacturer of the offered CBs.*
- *The bidder or the manufacturer must submit minimum of **two** end user's (performance) Certificates of the similar products supplied and delivered.*
- *The Bidders may wish to visit the Plant site to observe the installed CBs in the Powerhouse of Modi Khola Hydropower Station for making a proper assessment prior to making an offer.*
- *Bidders are strictly advised to complete the **Technical data sheet** and submit the detailed Catalogue / Brochures supporting the filled technical data and other Specifications of the offered equipment as mentioned above.*

Failure to submit the required Data Sheets, Experience Certificates and Brochures may cause the Bidder to be not substantial responsive and accordingly his Sealed Quotation may be rejected.

Deviations from Technical Requirements:

Signature: ……..……..

As Representative for: ……..……..

Address: ……. Date: ……

Section VI. SAMPLE FORMS

A. QUOTATION FORM

Date: _____

Quotation No: **MKHPS-074/075-ES-SQ03**

To,
The Station Manager,
Modi Khola Hydropower Station (NEA),
Dimuwa, Parbat.

Gentlemen,

Having examined the Sealed Quotation (SQ) Documents, we the undersigned, offer to **Supply, Delivery, Installation, Testing & Commissioning of 11 kV Indoor VCB for Incomer & 400/230 V ACB for Internal Distribution System at MKHPS** in conformity with the said SQ Documents for the sum of (Total SQ Amount in figures),……and in words ……..…… …… ……..…… or such other sums as may be ascertained in accordance with the Price Schedule 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 provide a Bank Guarantee acceptable to the Purchaser in the sum of ……..…… .. ……., equivalent to 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 **forty five (45) days** from the date of 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.

We certify/confirm that we comply with the eligibility requirements as per ITB Clause 2 of the SQ Documents.

Dated this _____ day of _____ month of 20_____.

[Name] _____

_____ _____

[Signature] [in the capacity of]

B. PRICE SCHEDULE (BILL OF QUANTITY)
Nepal Electricity Authority
Modi Khola Hydropower Station
PRICE SCHEDULE FOR SUPPLY, DELIVERY, INSTALLATION, TESTING & COMMISSIONING OF SPECIFIED ITEMS

Quotation No.: MKHPS-074/075-ES-SQ03 L/C: Local Currency (Nepalese Rupees)

BoQ No.	Description of Work	Qty. Required	Unit Price CIF Site (Dimuwa, Parbat) in NRs.		Total Price CIF Site (Dimuwa) in NRs.
			In Figure	In Words	
1	Supply, Delivery, Installation, Testing & Commissioning of 11 kV, 1250 A, 25 kA Indoor Vacuum Circuit Breaker (VCB) all Complete	1 Set			
2	Supply, Delivery, Installation, Testing & Commissioning of 400/230 V Air Circuit Breaker (ACB) for Internal Distribution System all Complete	1 Set			
				TOTAL	
				13% VAT	
				SUB-TOTAL	

The total Quotation Price for the above schedule is (In figure and words):

Local Currency (L/C): NRs. ……...…….

……..

Name and Seal of the Bidder:……..…….. Date:…….....

Authorized Signature:…….

[**Note:** The Bidders are instructed to include taxes such as Customs Duty, VAT and other taxes levied in Nepal in the Total quoted CIF Site Price. This form may be **expanded** or **modified** if necessary. In case of discrepancy between unit price and total, unit price shall prevail.]

C. CONTRACT AGREEMENT FORM

Date: _____

Quotation No: **MKHPS-074/075-ES-SQ03**

To,
The Station Manager,
Modi Khola Hydropower Station (NEA),
Dimuwa, Parbat.

THIS AGREEMENT made the _____ day of _____[mm] 20_____ between MKHPS, NEA (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 the **Supply, Delivery, Installation, Testing & Commissioning of 11 kV Indoor VCB for Incomer & 400/230 V ACB for Internal Distribution System at MKHPS** and has accepted a SQ by the Bidder for the Supply and Delivery of those Goods/Services in the sum of _____ _____ *[Contract price in words and figures in Nepalese Rupees]* (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. Invitation for Bids;
    b. Instruction to Bidders;
    c. Quotation Form and the Price Schedule submitted by the Supplier;
    d. The Conditions of Contract;
    e. The Schedule of Requirements;
    f. The Technical Specifications;
    g. The Purchaser's Notification of Award; and
    h. The Performance Bond.

3. This Agreement sets forth the entire Contract and agreement between the parties pertaining to the supply of the Goods/Services described herein and supersedes any and all earlier verbal or written agreements pertaining to the supply of the Goods. This Agreement shall prevail over all other Agreement documents.

4. In consideration of the payments to be made by the Purchaser to the Bidder as hereinafter mentioned, the Bidder 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.

5. The Purchaser hereby covenants to pay the Bidder, 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:
Signature:	Signature:
Designation:	Designation:
Seal:	Seal:

D. QUOTATION SECURITY FORM

Date: _____

Quotation No: **MKHPS-074/075-ES-SQ03**

To,
The Station Manager,
Modi Khola Hydropower Station (NEA), Dimuwa, Parbat.

Whereas _____ ***[name of the Bidder]*** (hereinafter called "the Bidder") has submitted his Sealed Quotation (SQ) dated _____ ***[date of submission of SQ]*** for the **Supply, Delivery, Installation, Testing & Commissioning of 11 kV Indoor VCB for Incomer & 400/230 V ACB for Internal Distribution System at MKHPS** (hereinafter called "Sealed Quotation").

KNOW ALL PEOPLE by these presents that We _____ _____ ***[name of bank]*** of Nepal, having our registered office at _____ ***[address of bank]*** (hereinafter called "the Bank"), are bound unto MKHPS, Nepal Electricity Authority (NEA) (hereinafter called "the Purchaser") in the sum of_____ _____ ***[Amount of the Guarantee in Words and Figures]*** for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this _____ day of _____[mm] 20_____.

THE CONDITIONS of this obligation are:

1. If the Bidder
   (a) withdraws its SQ during the period of bid validity specified by the Bidder on the SQ Documents; or
   (b) does not accept the correction of errors in accordance with the Instructions to Bidders; or
2. If the Bidder, having been notified of the acceptance of its SQ by the Purchaser during the period of bid validity:
   (a) fails or refuses to execute the Contract Agreement Form, if required in accordance with the Instructions to Bidders; 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 note that the amount claimed by him is due to him, owing to the occurrence of one or any of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to **Seventy five (75) calendar days** from the date of opening of the Sealed Quotation or as it may be extended by the Purchaser, notice of which extension(s) to the Bank is hereby waved and any demand in respect thereof should reach the Bank not later than the above date.

Name of the Bank: _____

_____ _____

[Signature of the Authorized Representative of the bank] Seal of the issuing Bank

E. PERFORMANCE SECURITY FORM

Date: _____

Quotation No: **MKHPS-074/075-ES-SQ03**

To,
The Station Manager,
Modi Khola Hydropower Station (NEA), Dimuwa, Parbat.

WHEREAS_____
[name and address of Supplier] (hereinafter called "the Supplier") has undertaken, in pursuance of Contract No……..dated _____*[yy/mm/dd]* to **Supply, Delivery, Installation, Testing & Commissioning of 11 kV Indoor VCB for Incomer & 400/230 V ACB for Internal Distribution System at MKHPS** (hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Bidder shall furnish you with a bank guarantee by a reputable bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Supplier such a Bank Guarantee:

THEREFORE we hereby affirm that we are the Guarantors and responsible to you, on behalf of the Supplier, up to a total of _____ _____ *[amount of the guarantee in words and figures Nepalese Rupees]*, and we undertake to pay you, upon your first written demand such sum being payable in the types and proportions of currencies in which the contract price is payable, and without cavil or argument, any sum or sums within the limits of_____ _____ *[amount of guarantee in Nepalese Rupees]* as aforesaid, without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of demanding the said debt from the Supplier before presenting us with the demand.

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

This Guarantee is valid until _____ day of _____(mm) 20_____.
[valid until the expiration of warranty period.]

Signature and seal of the Guarantor

_____

[name of bank]

_____

[address] [date]

_____ _____

F. MANUFACTURER'S AUTHORIZATION FORM

Date: _____

Quotation No: **MKHPS-074/075-ES-SQ03**

To,
The Station Manager,
Modi Khola Hydropower Station (NEA), Dimuwa, Parbat.

.

WHEREAS _____ *[name of the Manufacturer]* who are established and reputable manufacturers of _____ *[name and/or description of the Goods]* having factories at_____ *[address of factory]*.

We hereby authorize _____ *[name and address of Agent]* to submit a Bid, and subsequently negotiate and sign the Contract with you against IFSQ Quotation No._____*[reference of the Invitation for Bids]* for the Components ……., ……..., ……., ……. And ……. manufactured by us which are required for the **Supply, Delivery, Installation, Testing & Commissioning of 11 kV Indoor VCB for Incomer & 400/230 V ACB for Internal Distribution System** at your Plant MKHPS.

We hereby extend our full guarantee and warranty as per Clause 9 of the Conditions of Contract for the Goods offered for Supply and Delivery by the above firm against this Invitation for Sealed Quotations. We further extend our full commitment to provide sales service.

_____

[Signature and Seal for and on behalf of Manufacturer]

Note: This letter of authority should be on the letterhead of the Manufacturer and should be signed by a person competent and having the power of attorney to bind the Manufacturer. It should be included by the Bidder in its Sealed Quotation.

G. DECLARATION FORM FOR E-BIDDING

S. No	Description		Issued to (as applicable)	Issued to (as applicable)	Date of issue	No. of Pages
1	Notarized Power of Attorney from the Company to sign on Company's behalf (For Single Bidder)					
2	Joint Venture Agreement: *If any*					
3	Notarized Power of Attorney to sign the Bid on Company's behalf (Each Partner in case of JV)					
4	Notarized Power of Attorney to sign the Bid (On behalf of JV)					
5	Registration Certificate of the Bidder (and each partners in case of JV)					
6	Bid Bond					
7	Price Schedule					
8	Bid Forms					
9	Qualification Forms					
10	Complete Certified Audited Report of the Bidder (and each partner in case of JV)	First Year				
		Second Year				
		Last Year				
11	Bidder's Letter of Experience	1				
		2				
		3				
		4				
12	Manufacturer's Authorization	1				
		2				
		3				
		4				
13	Power of Attorney for signing the Bid Document & made the declaration					
14	Business License of Manufacturers	1				
		2				
		3				
		4				
15	User Certificates (Manufacturer)	1				
		2				

		3				
		4				
16	ISO Certificates	1				
		2				
		3				
		4				
17	Type Test Reports if required as per specification)	1				
		2				
		3				
		4				
18	Technical Data Sheet	1				
		2				
		3				
		4				
19	Other Certification (as per requirements)	1				
		2				
		3				
		4				