

THIS E COPY OF BID DOCUMENT IS FOR INFORMATION AND INSPECTION TO THE PROSPECTIVE BIDDERS. BIDDERS MUST PURCHASE BID DOCUMENT FROM ALTERNATIVE ENERGY PROMOTION CENTER (AEPC) AS INDICATED IN THE BID NOTICE FOR BIDDING.

**Government of Nepal**  
**Ministry of Energy, Water Resources and Irrigation**  
**ALTERNATIVE ENERGY PROMOTION CENTRE**

NEP: South Asia Sub regional Economic Cooperation Power System Expansion Project  
(SASEC/ADB)

ADB Project No: 44219, Loan No: 3139 NEP (SF), Grant No: 0398NEP (EF)

**Bidding Document**  
**for**  
**Procurement**  
**of**

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**Aankhe Khola Mini Hydro Subproject, 750 kW**

**Syangta-11, Thuli Bheri Municipality,**

**Dolpa District, Karnali Province, Nepal**

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**PART I     Bidding Procedures**

Section 1 - Instructions to Bidders (ITB)

Section 2 - Bid Data Sheet (BDS)

Section 3 - Evaluation and Qualification Criteria (EQC)

Section 4 - Bidding Forms (BDF)

Section 5 - Eligible Countries (ELC)

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**Issued on:**

**Invitation for Bids No.: AEPC/ADB/SASEC/NCB/MHP/10**

**NCB No: 10**

**Employer: Alternative Energy Promotion Center (AEPC)**

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# Section 1 - Instructions to Bidders

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# Section 1 - Instructions to Bidders

## A. General

- 1. Scope of Bid**
  - 1.1 In connection with the Invitation for Bids (IFB) indicated in the Bid Data Sheet (BDS), the Employer, as indicated in the BDS, issues this Bidding Document for the procurement of the Works as specified in Section 6 (Employer's Requirements). The name, identification, and number of contracts of this bidding are provided in the BDS.
  - 1.2 Throughout this Bidding Document,
    - (a) the term "in writing" means communicated in written form and delivered against receipt;
    - (b) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and
    - (c) "day" means calendar day.
- 2. Source of Funds**
  - 2.1 The Borrower or Recipient (hereinafter called "Borrower") indicated in the BDS has applied for or received financing (hereinafter called "funds") from the Asian Development Bank (hereinafter called "ADB") toward the cost of the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which this Bidding Document is issued.
  - 2.2 Payments by ADB will be made only at the request of the Borrower and upon approval by ADB in accordance with the terms and conditions of the Financing Agreement between the Borrower and ADB (hereinafter called "Financing Agreement"), and will be subject in all respects to the terms and conditions of that Financing Agreement. No party other than the Borrower shall derive any rights from the Financing Agreement or have any claim to the funds.
- 3. Fraud and Corruption**
  - 3.1 ADB's Anticorruption Policy requires Borrowers (including beneficiaries of ADB-financed activity), as well as Bidders, Suppliers, and Contractors under ADB-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, ADB
    - (a) defines, for the purposes of this provision, the terms set forth below as follows:
      - (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
      - (ii) "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
      - (iii) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the

- actions of a party;
- (iv) "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party;
  - (v) "obstructive practice" means (a) deliberately destroying, falsifying, altering, or concealing of evidence material to an ADB investigation; (b) making false statements to investigators in order to materially impede an ADB investigation; (c) failing to comply with requests to provide information, documents or records in connection with an Office of Anticorruption and Integrity (OAI) investigation; (d) threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or (e) materially impeding ADB's contractual rights of audit or access to information; and
  - (vi) "integrity violation" is any act which violates ADB's Anticorruption Policy, including (i) to (v) above and the following: abuse, conflict of interest, violations of ADB sanctions, retaliation against whistleblowers or witnesses, and other violations of ADB's Anticorruption Policy, including failure to adhere to the highest ethical standard.
- (b) will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations in competing for the Contract;
  - (c) will cancel the portion of the financing allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of ADB financing engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to ADB to remedy the situation;
  - (d) will impose remedial actions on a firm or an individual, at any time, in accordance with ADB's Anticorruption Policy and Integrity Principles and Guidelines (both as amended from time to time), including declaring ineligible, either indefinitely or for a stated period of time, to participate<sup>1</sup> in ADB-financed, administered, or supported activities or to benefit from an ADB-financed, administered, or supported contract, financially or otherwise, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations; and
  - (e) will have the right to require that a provision be included in bidding documents and in contracts financed by ADB, requiring

<sup>1</sup> Whether as a Contractor, Nominated Subcontractor, Consultant, Manufacturer or Supplier, or Service Provider; or in any other capacity (different names are used depending on the particular Bidding Document). A Nominated Subcontractor is one that either has been: (i) included by the Bidder in its prequalification application or bid because it brings specific and critical experience and know-how that are accounted for in the evaluation of the bidder's prequalification application or the bid; or (ii) appointed by the Employer.



Bidders, suppliers, and contractors to permit ADB or its representative to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by ADB.

3.2 Furthermore, Bidders shall be aware of the provisions of GCC 28.3 and 73.2 (i).

#### **4. Eligible Bidders**

4.1 A Bidder may be a natural person, private entity, or government-owned enterprise subject to ITB 4.5 – or any combination of them with a formal intent to enter into an agreement or under an existing agreement in the form of a Joint Venture. In the case of a Joint Venture:

- (a) all partners shall be jointly and severally liable; and
- (b) the Joint Venture shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the Joint Venture during the bidding process and, in the event the Joint Venture is awarded the Contract, during contract execution.

4.2 A Bidder, and all parties constituting the Bidder, shall have the nationality of an eligible country, in accordance with Section 5 (Eligible Countries). A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, or incorporated, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including related services.

4.3 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if any of, including but not limited to, the following apply:

- (a) they have controlling shareholders in common; or
- (b) they receive or have received any direct or indirect subsidy from any of them; or
- (c) they have the same legal representative for purposes of this bid; or
- (d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to material information about or improperly influence the Bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
- (e) a Bidder participates in more than one bid in this bidding process, either individually or as a partner in a joint venture, except for alternative offers permitted under ITB 13 of the Bidding Document. This will result in the disqualification of all Bids in which it is involved. However, subject to any finding of a conflict of interest in terms of 4.3 (a) - (d) above, this does not limit the participation of a Bidder as a Subcontractor in another Bid or of a firm as a Subcontractor in more than one Bid; or
- (f) a Bidder or any affiliated entity, participated as a Consultant in the

preparation of the design or technical specifications of the works that are the subject of the Bid; or

- (g) a Bidder was affiliated with a firm or entity that has been hired (or is proposed to be hired) by the Employer or Borrower as Engineer for the contract.

- 4.4 A firm shall not be eligible to participate in any procurement activities under an ADB-financed, administered, or supported project while under temporary suspension or debarment by ADB pursuant to its Anticorruption Policy (see ITB 3), whether such debarment was directly imposed by ADB, or enforced by ADB pursuant to the Agreement for Mutual Enforcement of Debarment Decisions. A bid from a temporary suspended or debarred firm will be rejected.
- 4.5 Government-owned enterprises in the Employer's country shall be eligible only if they can establish that they (i) are legally and financially autonomous, (ii) operate under commercial law, and (iii) are not a dependent agency of the Employer.
- 4.6 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- 4.7 Firms shall be excluded if by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country or any payments to persons or entities in that country.
- 4.8 In case a prequalification process has been conducted prior to the bidding process, this bidding is open only to prequalified Bidders.

**5. Eligible Materials, Equipment and Services**

- 5.1 The materials, equipment, and services to be supplied under the Contract shall have their origin in eligible source countries as defined in ITB 4.2 above and all expenditures under the Contract will be limited to such materials, equipment, and services. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment, and services.
- 5.2 For purposes of ITB 5.1 above, "origin" means the place where the materials and equipment are mined, grown, produced, or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that differs substantially in its basic characteristics or in purpose or utility from its components.

**B. Contents of Bidding Document**

**6. Sections of Bidding Document**

- 6.1 The Bidding Document consist of Parts I, II, and III, which include all the sections indicated below, and should be read in conjunction with any addenda issued in accordance with ITB 8.

**PART I Bidding Procedures**

Section 1 - Instructions to Bidders (ITB)

Section 2 - Bid Data Sheet (BDS)  
 Section 3 - Evaluation and Qualification Criteria (EQC)  
 Section 4 - Bidding Forms (BDF)  
 Section 5 - Eligible Countries (ELC)

**PART II Requirements**

Section 6 – Employer’s Requirements (ERQ)

**PART III Conditions of Contract and Contract Forms**

Section 7 - General Conditions of Contract (GCC)  
 Section 8 - Particular Conditions of Contract (PCC)  
 Section 9 - Contract Forms (COF)

- 6.2 The Invitation for Bids (IFB) issued by the Employer is not part of the Bidding Document.
- 6.3 The Employer is not responsible for the completeness of the Bidding Document and their Addenda, if they were not obtained directly from the source stated by the Employer in the IFB.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the bid.
- 7. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting**
- 7.1 A prospective Bidder requiring any clarification on the Bidding Document shall contact the Employer in writing at the Employer’s address indicated in the BDS or raise his inquiries during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of bids, within a period given in the BDS. The Employer shall forward copies of its response to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8 and ITB 22.2.
- 7.2 The Bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself, on its own risk and responsibility, all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder’s own expense.
- 7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
- 7.4 The Bidder’s designated representative is invited to attend a pre-bid meeting, if provided for in the BDS. The purpose of the meeting will be

to clarify issues and to answer questions on any matter that may be raised at that stage.

7.5 The Bidder is requested to submit any questions in writing, to reach the Employer not later than 1 week before the meeting.

7.6 Minutes of the pre-bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3. Any modification to the Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting.

7.7 Nonattendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.

#### **8. Amendment of Bidding Document**

8.1 At any time prior to the deadline for submission of Bids, the Employer may amend the Bidding Document by issuing addenda.

8.2 Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document from the Employer in accordance with ITB 6.3.

8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer may, at its discretion, extend the deadline for the submission of Bids, pursuant to ITB 22.2.

### **C. Preparation of Bids**

#### **9. Cost of Bidding**

9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

#### **10. Language of Bid**

10.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, shall be written in the language specified in the BDS. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the BDS, in which case, for purposes of interpretation of the Bid, such translation shall govern.

#### **11. Documents Comprising the Bid**

11.1 The Bid shall comprise two envelopes submitted simultaneously, one called the Technical Bid containing the documents listed in ITB 11.2 and the other the Price Bid containing the documents listed in ITB 11.3, both envelopes enclosed together in an outer single envelope.

11.2 The Technical Bid shall comprise the following:

(a) Letter of Technical Bid;

(b) Bid Security or Bid-Securing Declaration, in accordance with ITB

19;

- (c) alternative Bids, at Bidder's option and if permissible, in accordance with ITB 13;
- (d) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2;
- (e) documentary evidence in accordance with ITB 17, establishing the Bidder's qualifications to perform the contract;
- (f) Technical Proposal in accordance with ITB 16;
- (g) Any other document required in the BDS.

11.3 The Price Bid shall comprise the following:

- (a) Letter of Price Bid;
- (b) completed Price Schedules, in accordance with ITB 12 and ITB 14, or as stipulated in the BDS;
- (c) alternative price Bids, at Bidder's option and if permissible, in accordance with ITB 13;
- (d) Any other document required in the BDS.

11.4 In addition to the requirements under ITB 11.2, Bids submitted by a Joint Venture shall include a copy of the Joint Venture Agreement entered into by all partners. Alternatively, a Letter of Intent to execute a Joint Venture Agreement in the event of a successful Bid shall be signed by all partners and submitted with the Bid, together with a copy of the proposed agreement.

**12. Letters of Bid and Schedules**

12.1 The Letters of Technical Bid and Price Bid, and the Schedules, and all documents listed under Clause 11, shall be prepared using the relevant forms furnished in Section 4 (Bidding Forms). The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested and as required in the BDS.

**13. Alternative Bids**

13.1 Unless otherwise indicated in the BDS, alternative Bids shall not be considered.

13.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the BDS, as will the method of evaluating different times for completion.

13.3 When specified in the BDS pursuant to ITB 13.1, and subject to ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the Bidding Document must first price the Employer's design as described in the Bidding Document and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the lowest evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.

13.4 When specified in the BDS, Bidders are permitted to submit alternative technical solutions for specified parts of the Works. Such parts will be

identified in the BDS and described in Section 6 (Employer's Requirements). The method for their evaluation will be stipulated in Section 3 (Evaluation and Qualification Criteria).

#### **14. Bid Prices and Discounts**

- 14.1 The prices and discounts quoted by the Bidder in the Letter of Price Bid and in the Schedules shall conform to the requirements specified below.
- 14.2 The Bidder shall submit a bid for the whole of the works described in ITB 1.1 by filling in prices for all items of the Works, as identified in Section 4 (Bidding Forms). In case of admeasurement contracts, the Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.
- 14.3 The price to be quoted in the Letter of Price Bid shall be the total price of the Bid, excluding any discounts offered. Absence of the total bid price in the Letter of Price Bid may result in the rejection of the Bid.
- 14.4 The Bidder shall quote any discounts and the methodology for their application in the Letter of Price Bid, in accordance with ITB 12.1.
- 14.5 Unless otherwise provided in the BDS and the Conditions of Contract, the prices quoted by the Bidder shall be fixed. If the prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, the Bidder shall furnish the indexes and weightings for the price adjustment formulas in the Table(s) of Adjustment Data in Section 4 (Bidding Forms) and the Employer may require the Bidder to justify its proposed indexes and weightings.
- 14.6 If so indicated in ITB 1.1, bids are being invited for individual contracts or for any combination of contracts (packages). Bidders wishing to offer any price reduction for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Price reductions or discounts shall be submitted in accordance with ITB 14.4, provided the Bids for all contracts are submitted and opened at the same time.
- 14.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total Bid Price submitted by the Bidder.

#### **15. Currencies of Bid and Payment**

- 15.1 The currency(ies) of the Bid and payment shall be as specified in the BDS.
- 15.2 Bidders may be required by the Employer to justify, to the Employer's satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the prices shown in the appropriate form(s) of Section 4, in which case a detailed breakdown

of the foreign currency requirements shall be provided by Bidders.

- 16. Documents Comprising the Technical Proposal**
- 16.1 The Bidder shall furnish a Technical Proposal including a statement of work methods, equipment, personnel, schedule, and any other information as stipulated in Section 4 (Bidding Forms), in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work requirements and the completion time.
- 17. Documents Establishing the Qualifications of the Bidder**
- 17.1 To establish its qualifications to perform the Contract in accordance with Section 3 (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding information sheets included in Section 4 (Bidding Forms).
- 17.2 Domestic Bidders, individually or in joint ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility in accordance with ITB 35.
- 18. Period of Validity of Bids**
- 18.1 Bids shall remain valid for the period specified in the BDS after the bid submission deadline date prescribed by the Employer. A bid valid for a shorter period shall be rejected by the Employer as nonresponsive.
- 18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a bid security is requested in accordance with ITB 19, it shall also be extended 28 days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its Bid.
- 19. Bid Security/Bid-Securing Declaration**
- 19.1 Unless otherwise specified in the BDS, the Bidder shall furnish as part of its Bid, in original form, either a Bid-Securing Declaration or a bid security as specified in the BDS. In the case of a bid security, the amount and currency shall be as specified in the BDS.
- 19.2 If a Bid-Securing Declaration is required pursuant to ITB 19.1, it shall use the form included in Section 4 (Bidding Forms). The Employer will declare a Bidder ineligible to be awarded a Contract for a specified period of time, as indicated in the BDS, if the Bid-Securing Declaration is executed.
- 19.3 If a bid security is specified pursuant to ITB 19.1, the bid security shall be, at the Bidder's option, in any of the following forms:
- (a) an unconditional bank guarantee,
  - (b) an irrevocable letter of credit, or
  - (c) a cashier's or certified check,
- all from a reputable bank from an eligible country as described in Section 5 (Eligible Countries). In the case of a bank guarantee, the bid security shall be submitted either using the Bid Security Form included in Section 4 (Bidding Forms) or another form acceptable to the Employer. The form must include the complete name of the Bidder. The bid security shall be valid for 28 days beyond the original validity period of the bid, or beyond any period of extension if requested under

## ITB 18.2.

- 19.4 Unless otherwise specified in the BDS, any Bid not accompanied by a substantially compliant bid security or Bid-Securing Declaration, if one is required in accordance with ITB 19.1, shall be rejected by the Employer as nonresponsive.
- 19.5 If a bid security is specified pursuant to ITB 19.1, the bid security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's furnishing of the performance security pursuant to ITB 42.
- 19.6 If a bid security is specified pursuant to ITB 19.1, the bid security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required performance security.
- 19.7 The bid security may be forfeited or the Bid-Securing Declaration executed
- (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letters of Technical Bid and Price Bid, except as provided in ITB 18.2; or
  - (b) if the successful Bidder fails to
    - (i) sign the Contract in accordance with ITB 41;
    - (ii) furnish a performance security in accordance with ITB 42;
    - (iii) accept arithmetical corrections in accordance with ITB 33; or
    - (iv) furnish a domestic preference security, if applicable, in accordance with ITB 42.
- 19.8 The bid security or the Bid-Securing Declaration of a Joint Venture shall be in the name of the Joint Venture that submits the Bid. If the Joint Venture has not been legally constituted at the time of bidding, the bid security or the Bid-Securing Declaration shall be in the names of all future partners as named in the letter of intent mentioned in ITB 4.1.

**20. Format and Signing of Bid**

- 20.1 The Bidder shall prepare one original set of the Technical Bid and one original of the Price Bid comprising the Bid as described in ITB 11 and clearly mark it "ORIGINAL - TECHNICAL BID" and "ORIGINAL - PRICE BID." Alternative Bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE." In addition, the Bidder shall submit copies of the Bid in the number specified in the BDS, and clearly mark each of them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
- 20.2 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid, except for unamended printed literature, shall be signed or initialed by



the person signing the bid. If a Bidder submits a deficient authorization, the Bid shall not be rejected in the first instance. The Employer shall request the Bidder to submit an acceptable authorization within the number of days as specified in the BDS. Failure to provide an acceptable authorization within the prescribed period of receiving such a request shall cause the rejection of the Bid.

- 20.3 Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

#### **D. Submission and Opening of Bids**

##### **21. Sealing and Marking of Bids**

- 21.1 Bidders may always submit their Bids by mail or by hand. When so specified in the BDS, Bidders shall have the option of submitting their Bids electronically. Procedures for submission, sealing, and marking are as follows:

- (a) Bidders submitting Bids by mail or by hand shall enclose the original of the Technical Bid, the original of the Price Bid, and each copy of the Technical Bid and each copy of the Price Bid, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL - TECHNICAL BID," "ORIGINAL - PRICE BID," and "COPY NO... - TECHNICAL BID," and "COPY NO.... - PRICE BID." These envelopes, the first containing the originals and the others containing copies, shall then be enclosed in one single envelope per set. If permitted in accordance with ITB 13, alternative Bids shall be similarly sealed, marked and included in the sets. The rest of the procedure shall be in accordance with ITB 21.2 and ITB 21.3.
- (b) Bidders submitting Bids electronically shall follow the electronic bid submission procedures specified in the BDS.

- 21.2 The inner and outer envelopes shall

- (a) bear the name and address of the Bidder;
- (b) be addressed to the Employer as provided in BDS 22.1; and
- (c) bear the specific identification of this bidding process indicated in the BDS 1.1.

- 21.3 The outer envelopes and the inner envelopes containing the Technical Bid shall bear a warning not to open before the time and date for the opening of Technical Bid, in accordance with ITB 25.1.

- 21.4 The inner envelopes containing the Price Bid shall bear a warning not to open until advised by the Employer in accordance with ITB 25.7.

- 21.5 If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.

##### **22. Deadline for Submission of Bids**

- 22.1 Bids must be received by the Employer at the address and no later than the date and time indicated in the BDS.

22.2 The Employer may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

**23. Late Bids**

23.1 The Employer shall not consider any Bid that arrives after the deadline for submission of bids, in accordance with ITB 22. Any Bid received by the Employer after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

**24. Withdrawal, Substitution, and Modification of Bids**

24.1 A Bidder may withdraw, substitute, or modify its Bid – Technical or Price – after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 20.2, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be

(a) prepared and submitted in accordance with ITB 20 and ITB 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” “SUBSTITUTION,” “MODIFICATION;” and

(b) received by the Employer prior to the deadline prescribed for submission of Bids, in accordance with ITB 22.

24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.

24.3 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the period of bid validity specified by the Bidder on the Letters of Technical Bid and Price Bid or any extension thereof.

**25. Bid Opening**

25.1 The Employer shall open the Technical Bids in public at the address, on the date, and time specified in the BDS in the presence of Bidders’ designated representatives and anyone who choose to attend. Any specific electronic bid opening procedures required if electronic bidding is permitted in accordance with ITB 21.1, shall be as specified in the BDS. The Price Bids will remain unopened and will be held in custody of the Employer until the specified time of their opening. If the Technical Bid and Price Bid are submitted together in one envelope, the Employer may reject the entire Bid. Alternatively, the Price Bid may be immediately resealed for later evaluation.

25.2 First, envelopes marked “WITHDRAWAL” shall be opened and read out and the envelope with the corresponding Bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening.

25.3 Second, outer envelopes marked “SUBSTITUTION” shall be opened. The inner envelopes containing the Substitution Technical Bid and/or Substitution Price Bid shall be exchanged for the corresponding envelopes being substituted, which are to be returned to the Bidder

unopened. Only the Substitution Technical Bid, if any, shall be opened, read out, and recorded. Substitution Price Bid will remain unopened in accordance with ITB 25.1. No envelope shall be substituted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out and recorded at bid opening.

25.4 Next, outer envelopes marked "MODIFICATION" shall be opened. No Technical Bid and/or Price Bid shall be modified unless the corresponding modification notice contains a valid authorization to request the modification and is read out and recorded at the opening of Technical Bids. Only the Technical Bids, both Original as well as Modification, are to be opened, read out, and recorded at the opening. Price Bids, both Original and Modification, will remain unopened in accordance with ITB 25.1.

25.5 All other envelopes holding the Technical Bids shall be opened one at a time, and the following read out and recorded:

- (a) the name of the Bidder;
- (b) whether there is a modification or substitution;
- (c) the presence of a bid security or a Bid-Securing Declaration, if required; and
- (d) any other details as the Employer may consider appropriate.

Only Technical Bids and alternative Technical Bids read out and recorded at bid opening shall be considered for evaluation. Unless otherwise specified in the BDS, all pages of the Letter of Technical Bid are to be initialed by at least three representatives of the Employer attending the bid opening. No Bid shall be rejected at the opening of Technical Bids except for late bids, in accordance with ITB 23.1.

25.6 The Employer shall prepare a record of the opening of Technical Bids that shall include, as a minimum, the name of the Bidder and whether there is a withdrawal, substitution, or modification; alternative proposals; and the presence or absence of a bid security or a Bid-Securing Declaration, if one was required. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders who submitted Bids on time, and posted online when electronic bidding is permitted.

25.7 At the end of the evaluation of the Technical Bids, the Employer will invite bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified for award to attend the opening of the Price Bids. The date, time, and location of the opening of Price Bids will be advised in writing by the Employer. Bidders shall be given reasonable notice for the opening of Price Bids.

25.8 The Employer will notify Bidders in writing who have been rejected on the grounds of their Technical Bids being substantially nonresponsive to the requirements of the Bidding Document and return their Price Bids unopened.

25.9 The Employer shall conduct the opening of Price Bids of all Bidders who submitted substantially responsive Technical Bids, in the presence of Bidders' representatives who choose to attend at the address, on the date, and time specified by the Employer. The Bidder's representatives who are present shall be requested to sign a register evidencing their attendance.

25.10 All envelopes containing Price Bids shall be opened one at a time and the following read out and recorded:

- (a) the name of the Bidder;
- (b) whether there is a modification or substitution;
- (c) the Bid Prices, including any discounts and alternative offers; and
- (d) any other details as the Employer may consider appropriate.

Only Price Bids, discounts, and alternative offers read out and recorded during the opening of Price Bids shall be considered for evaluation. Unless otherwise specified in the BDS, all pages of the Letter of Price Bid and Schedules are to be initialed by at least three representatives of the Employer attending the bid opening. No Bid shall be rejected at the opening of Price Bids.

25.11 The Employer shall prepare a record of the opening of Price Bids that shall include, as a minimum, the name of the Bidder, the Bid Price (per lot if applicable), any discounts, and alternative offers. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders who submitted Bids on time, and posted online when electronic bidding is permitted.

## **E. Evaluation and Comparison of Bids**

### **26. Confidentiality**

26.1 Information relating to the examination, evaluation, comparison, and postqualification of Bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.

26.2 Any attempt by a Bidder to influence the Employer in the evaluation of the Bids or Contract award decisions may result in the rejection of its Bid.

26.3 Notwithstanding ITB 26.2, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it may do so in writing.

### **27. Clarification of Bids**

27.1 To assist in the examination, evaluation, and comparison of the Technical and Price Bids, the Employer may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in the substance of the Technical Bid or prices in the Price Bid shall be sought, offered, or permitted, except to

confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Price Bids, in accordance with ITB 33.

27.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its Bid may be rejected.

**28. Deviations, Reservations, and Omissions**

28.1 During the evaluation of bids, the following definitions apply:

- (a) "Deviation" is a departure from the requirements specified in the Bidding Document;
- (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and
- (c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.

**29. Examination of Technical Bids**

29.1 The Employer shall examine the Technical Bid to confirm that all documents and technical documentation requested in ITB 11.2 have been provided, and to determine the completeness of each document submitted.

29.2 The Employer shall confirm that the following documents and information have been provided in the Technical Bid. If any of these documents or information is missing, the offer shall be rejected.

- (a) Letter of Technical Bid;
- (b) written confirmation of authorization to commit the Bidder;
- (c) Bid Security or Bid-Securing Declaration, if applicable; and
- (d) Technical Proposal in accordance with ITB 16.

**30. Responsiveness of Technical Bid**

30.1 The Employer's determination of a Bid's responsiveness is to be based on the contents of the Bid itself, as defined in ITB 11.

30.2 A substantially responsive Technical Bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,

- (a) if accepted, would:
  - (i) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
  - (ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer's rights or the Bidder's obligations under the proposed Contract; or
- (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.

30.3 The Employer shall examine the technical aspects of the Bid submitted in accordance with ITB 16, Technical Proposal, in particular, to confirm that all requirements of Section 6 (Employer's Requirements) have been met without any material deviation, reservation, or omission.

30.4 If a Bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

**31. Nonmaterial Nonconformities**

31.1 Provided that a Bid is substantially responsive, the Employer may waive any nonconformities in the Bid that do not constitute a material deviation, reservation, or omission.

31.2 Provided that a Technical Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Technical Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the Price Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

31.3 Provided that a Technical Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component. The adjustment shall be made using the method indicated in Section 3 (Evaluation and Qualification Criteria).

**32. Qualification of the Bidder**

32.1 The Employer shall determine to its satisfaction during the evaluation of Technical Bids whether Bidders meet the qualifying criteria specified in Section 3 (Evaluation and Qualification Criteria).

32.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17.1.

32.3 An affirmative determination shall be a prerequisite for the opening and evaluation of a Bidder's Price Bid. A negative determination shall result into the disqualification of the Bid, in which event the Employer shall return the unopened Price Bid to the Bidder.

**33. Correction of Arithmetical Errors**

33.1 During the evaluation of Price Bids, the Employer shall correct arithmetical errors on the following basis:

(a) 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 Employer 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.

(b) 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.

(c) If there is a discrepancy between the bid price in the Summary of Bill of Quantities and the bid amount in item (c) of the Letter of Price Bid, the bid price in the Summary of Bill of Quantities will

prevail and the bid amount in item (c) of the Letter of Price Bid will be corrected.

- (d) 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.

33.2 If the Bidder that submitted the lowest evaluated bid does not accept the correction of errors, its Bid shall be disqualified and its bid security may be forfeited or its Bid-Securing Declaration executed.

**34. Conversion to Single Currency**

34.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted into a single currency as specified in the BDS.

**35. Margin of Preference**

35.1 Unless otherwise specified in the BDS, a margin of preference shall not apply.

**36. Evaluation of Price Bids**

36.1 The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.

36.2 To evaluate the Price Bid, the Employer shall consider the following:

- (a) the bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities for admeasurement contracts, or Schedule of Prices for lump sum contracts, but including Daywork items, where priced competitively;
- (b) price adjustment for correction of arithmetic errors in accordance with ITB 33.1;
- (c) price adjustment due to discounts offered in accordance with ITB 14.4;
- (d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 34;
- (e) adjustment for nonconformities in accordance with ITB 31.3; and
- (f) application of all the evaluation factors indicated in Section 3 (Evaluation and Qualification Criteria).

36.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.

36.4 If this Bidding Document allows Bidders to quote separate prices for different contracts, and to award multiple contracts to a single Bidder, the methodology to determine the lowest evaluated price of the contract combinations, including any discounts offered in the Letter of Price Bid, is specified in Section 3 (Evaluation and Qualification Criteria).

36.5 If the Bid for an admeasurement contract, which results in the lowest Evaluated Bid Price, is seriously unbalanced, front loaded or substantially below updated estimates in the opinion of the Employer, the Employer may require the Bidder to produce detailed price

analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

- 37. Comparison of Bids** 37.1 The Employer shall compare all substantially responsive Bids to determine the lowest evaluated Bid, in accordance with ITB 36.2.
- 38. Employer's Right to Accept Any Bid, and to Reject Any or All Bids** 38.1 The Employer reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

## **F. Award of Contract**

- 39. Award Criteria** 39.1 The Employer shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated Bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.
- 40. Notification of Award** 40.1 Prior to the expiration of the period of bid validity, the Employer shall notify the successful Bidder, in writing, that its Bid has been accepted.
- 40.2 At the same time, the Employer shall also notify all other Bidders of the results of the bidding. The Employer will publish in an English language newspaper or well-known freely accessible website the results identifying the bid and lot numbers and the following information: (i) name of each Bidder who submitted a Bid; (ii) bid prices as read out at bid opening; (iii) name and evaluated prices of each Bid that was evaluated; (iv) name of bidders whose bids were rejected and the reasons for their rejection; and (v) name of the winning Bidder, and the price it offered, as well as the duration and summary scope of the contract awarded. After publication of the award, unsuccessful Bidders may request in writing to the Employer for a debriefing seeking explanations on the grounds on which their Bids were not selected. The Employer shall promptly respond in writing to any unsuccessful Bidder who, after publication of contract award, requests a debriefing.
- 40.3 Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.
- 41. Signing of Contract** 41.1 Promptly after notification, the Employer shall send the successful Bidder the Contract Agreement.
- 41.2 Within 28 days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.
- 42. Performance** 42.1 Within 28 days of the receipt of notification of award from the



**Security**

Employer, the successful Bidder shall furnish the performance security in accordance with the Conditions of Contract, subject to ITB 36.5, using for that purpose the Performance Security Form included in Section 9 (Contract Forms), or another form acceptable to the Employer.

- 42.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security or execution of the Bid-Securing Declaration. In that event the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.
- 42.3 The above provision shall also apply to the furnishing of a domestic preference security, if so required.

## Section 2 - Bid Data Sheet

### A. General

ITB 1.1	The number of the Invitation for Bids (IFB) is: <b>AEPC/ADB/SASEC/NCB/MHP/10</b>
ITB 1.1	The Employer is: <b>Alternative Energy Promotion Center (AEPC)</b>
ITB 1.1	The name of the bidding process is: <b>Single stage Two Envelope</b> The identification number of the bidding process is: <b>AEPC/ADB/SASEC/NCB/MHP/10</b> The number and identification of lots comprising this bidding process is: <b>None</b>
ITB 2.1	The Borrower is: <b>Nepal</b>
ITB 2.1	The name of the Project is: <b>SASEC Power System Expansion off-grid Component / Aankhe Khola Mini Hydro Subproject.</b>

### B. Contents of Bidding Documents

ITB 7.1	For <u>clarification purposes</u> only, the Employer's address is: Attention: Project Manager Street Address: Midbaneshwor, Kathmandu Floor/Room number: 2 <sup>nd</sup> Floor City: Kathmandu Country: Nepal Telephone: : +9771-4498013, 4498014 Facsimile number: +9771-4498013, 4498014 Post Box No: 14364 Electronic mail address: narayan.adhikari@aepc.gov.np Requests for clarification should be received by the Employer no later than: <b>6 April 2022</b>
ITB 7.4	A Pre-Bid meeting will take place. Date: <b>15 March 2022</b> Time: <b>2 PM</b> Place: AEPC Hall, Mid Baneshwor, Kathmandu, Nepal A site visit will be conducted by the Employer. The cost of site visit will be borne by the Bidder.

### C. Preparation of Bids

ITB 10.1	The language of the bid is: English
ITB 11.2 (g)	The Bidder shall submit with its Technical Bid the following additional documents: <b>None</b>
ITB 11.3 (b)	In accordance with ITB 12 and ITB 14, the following schedules shall be submitted with the bid, including the priced Bill of Quantities for admeasurement contracts and Activity Schedule for lump sum contracts: <b>Work Schedule</b>
ITB 11.3 (d)	The Bidder shall submit with its Price Bid the following additional documents: <b>None</b>
ITB 12.1	The units and rates in figures entered into the Bill of Quantities and Day-work Schedule should be typewritten or if written by hand, must be in print form. Bill of Quantities and Day-work Schedule not presented accordingly may be considered nonresponsive.
ITB 13.1	Alternative bids shall not be permitted.
ITB 13.2	Alternative bids shall not be permitted.
ITB 13.4	<b>NOT APPLICABLE</b>
ITB 14.5	The prices quoted by the Bidder will not be subject to adjustment during the performance of the Contract.
ITB 15.1	The prices shall be quoted by the bidder and shall be paid in: <b>Nepalese Rupees</b>
ITB 18.1	The bid validity period shall be <b>120</b> days.
ITB 19.1	The Bidder shall furnish a bid security in the amount of NRs. 5,370,000.
ITB 19.2	The ineligibility period will be <b>(Not Applicable)</b>
ITB 19.4	Any bid not accompanied by an irrevocable and callable bid security shall be rejected by the Employer as nonresponsive. However, if a bidder submits a bid security that deviates in form, amount and/or period of validity, the Employer shall request the Bidder to submit a compliant bid security within <b>7</b> days of receiving such a request. Failure to provide a compliant bid security within the prescribed period of receiving such a request shall cause the rejection of the Bid.
ITB 20.1	In addition to the original Bid, the number of copies is: 2
ITB 20.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: <b>An organizational document, board resolution or its equivalent, or power of attorney specifying the representative's authority to sign the Bid on behalf of the Bidder. If the Bidder is an intended or an existing joint venture, the power of attorney should be signed by all partners and specify</b>

	<b>the authority of the named representative of the joint venture to sign on behalf of the intended or existing joint venture. If the joint venture has not yet been formed, also include evidence from all proposed joint venture partners of their intent to enter into a joint venture in the event of a contract award in accordance with ITB 11.4.</b>
<b>ITB 20.2</b>	The Bidder shall submit an acceptable authorization within <b>7</b> days.

#### **D. Submission and Opening of Bids**

<b>ITB 21.1</b>	Bidders <b>do not</b> have the option of submitting their Bids electronically.
<b>ITB 21.1 (b)</b>	<b>NOT APPLICABLE</b>
<b>ITB 22.1</b>	For <b>bid submission purposes</b> only, the Employer's address is: Attention: Project Manager, AEPC/SASEC Street Address: Midbaneshwor, Kathmandu Floor/Room number: AEPC Building City: Kathmandu Country: Nepal <b>The deadline for bid submission is:</b> Date: <b>13 April 2022</b> Time: 12:00 hrs Nepal Standard Time
<b>ITB 25.1</b>	The opening of the Technical Bid shall take place at: Street Address: Midbaneshwor, Kathmandu Floor/Room number: AEPC Building City: Kathmandu Country: Nepal Date: <b>13 April 2022</b> Time: <b>Immediately after the deadline for submission of the Bids.</b>
<b>ITB 25.1</b>	If electronic bid submission is permitted in accordance with ITB 21.1, the specific bid opening procedures shall be: <b>(Not Applicable)</b>
<b>ITB 25.5</b>	The Letter of Technical Bid shall be initialed by <b>at least 3</b> representatives of the Employer attending the Bid opening.
<b>ITB 25.10</b>	The Letter of Price Bid and Schedules shall be initialed by <b>at least 3</b> representatives of the Employer attending the Bid opening.

#### **E. Evaluation and Comparison of Bids**

<b>ITB 34.1</b>	Not applicable.
<b>ITB 35.1</b>	A margin of preference shall not apply.

# Section 3 - Evaluation and Qualification Criteria

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## 1. Evaluation

In addition to the criteria listed in ITB 36.2 (a) – (e), other relevant factors are as follows:

### 1.1 Adequacy of Technical Proposal

Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section 6 (Employer's Requirements).

Non-compliance with equipment and personnel requirements described in Section 6 (Employer's Requirements) shall not normally be a ground for bid rejection, and such noncompliance will be subject to clarification during bid evaluation and rectification prior to contract award.

### 1.2 Completion Time

Time to complete the **Aankhe Khola Mini Hydro Subproject** excluding the time for Operation and Maintenance shall be **540 days** from the effective date of the Contract (Site Possession Date) Agreement. Earlier completion is permitted without credit. No other alternative completion schedule is permitted

### 1.3 Technical Alternatives

Not Applicable

### 1.4 Quantifiable Nonconformities and Omissions

Subject to ITB 14.2 and ITB 36.2, the evaluated cost of quantifiable nonconformities including omissions, is determined as follows:

Pursuant to ITB 31.3, the cost of all quantifiable nonmaterial non conformities shall be evaluated, including omissions in Daywork where competitively priced but excluding omission of prices in the Bill of Quantities. The Employer will make its own assessment of the cost of any non material non conformities and omissions for the purpose of ensuring fair comparison of bids

### 1.5 Margin of Preference (Not Applicable)

### 1.6 Multiple Contracts

[Not Applicable]

## 2. Qualification

It is the legal entity or entities comprising the Bidder, and not the Bidder's parent companies, subsidiaries, or affiliates, that must satisfy the qualification criteria described below.

### 2.1 Eligibility

Criteria	Compliance Requirements			Documents
Requirement	Single Entity	Joint Venture		Submission Requirements
		All Partners Combined	Each Partner	

#### 2.1.1 Nationality

Criteria	Single Entity	All Partners Combined	Each Partner	One Partner	Documents
Nationality in accordance with ITB Subclause 4.2.	must meet requirement	must meet requirement	must meet requirement	not applicable	Forms ELI -1; ELI -2 with attachments

#### 2.1.2 Conflict of Interest

Criteria	Single Entity	All Partners Combined	Each Partner	One Partner	Documents
No conflicts of interest in accordance with ITB Subclause 4.3.	must meet requirement	must meet requirement	must meet requirement	not applicable	Letter of Technical Bid

#### 2.1.3 ADB Eligibility

Criteria	Single Entity	All Partners Combined	Each Partner	One Partner	Documents
Not having been declared ineligible by ADB, as described in ITB Subclause 4.4.	must meet requirement	must meet requirement	must meet requirement	not applicable	Letter of Technical Bid

#### 2.1.4 Government-Owned Enterprise

Criteria	Single Entity	All Partners Combined	Each Partner	One Partner	Documents
Bidder required to meet conditions of ITB Subclause 4.5.	must meet requirement	must meet requirement	must meet requirement	not applicable	Forms ELI -1, ELI - 2 with attachments

#### 2.1.5 United Nations Eligibility

Criteria	Single Entity	All Partners Combined	Each Partner	One Partner	Documents
Not having been excluded by an act of compliance with a UN Security Council resolution in accordance with ITB Subclause 4.7.	must meet requirement	must meet requirement	must meet requirement	not applicable	Letter of Technical Bid

## **2.2 Pending Litigation**

Pending litigation and arbitration criterion shall not apply.



## 2.3 Financial Situation

### 2.3.1 Historical Financial Performance

Criteria	Compliance Requirements				Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
Submission of audited financial statements or, if not required by the law of the Bidder's country, other financial statements acceptable to the Employer, for the last <b>3</b> years to demonstrate the current soundness of the Bidder's financial position. As a minimum, the Bidder's net worth for the last year, calculated as the difference between total assets and total liabilities should be positive.	must meet requirement	not applicable	must meet requirement	not applicable	Form FIN - 1 with attachments

### 2.3.2 Average Annual Construction Turnover

Criteria	Compliance Requirements				Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
Minimum average annual construction turnover of NRs <b>269 million<sup>1</sup></b> , calculated as total certified payments received for contracts in progress or completed, within <b>best 3 years out of last 7</b> years.	must meet requirement	must meet requirement	must meet 25% of the requirement	must meet 40% of the requirement	Form FIN - 2

**Note:**

(1) Only the net amount shall be calculated after deducting the amount for VAT and such amount shall be adjusted to present value by applying wholesale price index of Nepal Rastra Bank.

### 2.3.3 Financial Resources

Criteria	Compliance Requirements			Documents	
	Single Entity	Joint Venture			Submission Requirements
All Partners Combined		Each Partner	One Partner		
<p>For Single Entities:</p> <p>The Bidder must demonstrate that its financial resources defined in FIN - 3, less its financial obligations for its current contract commitments defined in FIN - 4, meet or exceed the total requirement for the Subject Contract of NRs. 45,000,000</p>	must meet requirement	not applicable	not applicable	not applicable	Form FIN – 3 and Form FIN – 4
<p>For Joint Ventures:</p> <p>(1) One partner must demonstrate that its financial resources defined in FIN - 3, less its financial obligations for its own current contract commitments defined in FIN - 4, meet or exceed its required share of NRs. 18,000,000 from the total requirement for the Subject Contract.</p> <p>AND</p>	not applicable	not applicable	not applicable	must meet requirement	Form FIN – 3 and Form FIN – 4
<p>(2) Each partner must demonstrate that its financial resources defined in FIN - 3, less its financial obligations for its own current contract commitments defined in FIN - 4, meet or exceed its required share of 11,250,000 from the total requirement for the Subject Contract.</p> <p>AND</p>	not applicable	not applicable	must meet requirement	not applicable	Form FIN – 3 and Form FIN – 4
<p>(3) The joint venture must demonstrate that the combined financial resources of all partners defined in FIN - 3, less all the partners' total financial obligations for the current contract commitments defined in FIN - 4, meet or exceed the total requirement for the Subject Contract of NRs. 45,000,000</p>	not applicable	must meet requirement	not applicable	not applicable	Form FIN – 3 and Form FIN – 4

## 2.4 Construction Experience

### 2.4.1 Contracts of Similar Size

Criteria	Compliance Requirements			Documents	
	Requirement	Single Entity	Joint Venture		Submission Requirements
All Partners Combined			Each Partner	One Partner	
Participation in at least one contract that has been successfully or substantially completed within the last <b>5</b> years where the value of the Bidder's participation exceeds <b>NRs 161.25 million<sup>1</sup></b> . The similarity of the Bidder's participation shall be based on micro/mini/small hydro projects, any irrigation project with construction of headworks and lined irrigation canal and any water supply projects with construction of intakes, water retaining structures, canal or pipe lines or other characteristics as described in Section 6 (Employer's Requirements).	must meet requirement	not applicable	Should have participated in at least one contract that has been successfully or substantially completed within the last five years where the value of the Bidder's participation exceeds <b>NRs. 67 million</b>	must meet requirement	Form EXP -1

**Note:**

- (1) Only the net amount shall be calculated after deducting the amount for VAT and such amount shall be adjusted to present value by applying wholesale price index of Nepal Rastra Bank

### 2.4.2 Construction Experience in Key Activities

(May be complied with by Specialist Subcontractors. Employer shall require evidence of subcontracting agreement from the Bidder. Specialist Subcontractor is a specialist enterprise engaged for highly specialized processes which cannot be provided by the main Contractor.)

Criteria	Compliance Requirements			Documents	
	Requirement	Single Entity	Joint Venture		Submission Requirements
All Partners Combined			Each Partner	One Partner	
For the above or other contracts executed during the period stipulated in 2.4.1 above, a minimum construction experience in the following key activities:	must meet requirements	must meet requirements	not applicable	not applicable	Form EXP-2
1. Construction of civil work ( e.g. Headworks, Headrace Canal, Penstock, Power house) related to hydro power plant of > or = 50 kW each and Cumulative total capacity of Project > or = 300 kW					
2. Supply and installation of all Electro-mechanical equipment for a hydro electric plant of > or = 50 kW each and cumulative total capacity of Project > or =					

300 kW					
3. Supply and installation of all Hydromechanical equipment for a hydro electric plant of > or = 50 kW each and communicative total capacity of Project > or = 300 kW					
4. Supply and installation of 11 kV or greater electric power transmission and distribution line at least 6 km					

# Section 4 - Bidding Forms

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# Letter of Technical Bid



*The bidder must accomplish the Letter of Technical Bid on its letterhead clearly showing the bidder's complete name and address.*

Date: .....

ICB/NCB No.: .....

Invitation for Bid No.: .....

To:.....

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) 8.
- (b) We offer to execute in conformity with the Bidding Documents the following Works: \_\_\_\_\_  
\_\_\_\_\_
- (c) Our Bid consisting of the Technical Bid and the Price Bid shall be valid for a period of **120** days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- (d) Our firm, including any Subcontractors or Suppliers for any part of the Contract, have nationalities from eligible countries in accordance with ITB 4.2.
- (e) We, including any Subcontractors or Suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 4.3.
- (f) We are not participating, as a Bidder in more than one Bid in this bidding process in accordance with ITB 4.3(e).
- (g) Our firm, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, has not been declared ineligible by ADB, under the Employer's country laws or official regulations or by an act of compliance with a decision of the United Nations Security Council.

- (h) [We are not a government-owned enterprise] / [We are a government-owned enterprise but meet the requirements of ITB 4.5].<sup>1</sup>
- (i) We agree to permit ADB or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by ADB.
- (j) If our Bid is accepted, we commit to mobilizing key equipment and personnel in accordance with the requirements set forth in Section 6 (Employer's Requirements) and our technical proposal, or as otherwise agreed with the Employer.

Name .....

In the capacity of .....

Signed .....

Duly authorized to sign the Bid for and on behalf of .....

Date .....

---

<sup>1</sup> Use one of the two options as appropriate.

# Letter of Price Bid



The bidder must accomplish the Letter of Price Bid on its letterhead clearly showing the bidder's complete name and address.

Date: .....

ICB/NCB No.: .....

Invitation for Bid No.: .....

To:.....

We, the undersigned, declare that:

(a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) 8.

(b) We offer to execute in conformity with the Bidding Documents the following Works: \_\_\_\_\_  
\_\_\_\_\_

(c) The total price of our Bid, excluding any discounts offered in item (d) below is:

*[amount of foreign currency in words], [amount in figures], and [amount of local currency in words], [amount in figures]*

*The total bid price from the Summary of Bill of Quantities for admeasurement contracts or Activity Schedule for lump sum contracts should be entered by the bidder inside this box or when left blank is the Bid Price indicated in the Bill of Quantities.*

*Absence of the total bid price in the Letter of Price Bid or the Bill of Quantity may result in the rejection of the bid*

(d) The discounts offered and the methodology for their application are as follows: \_\_\_\_\_  
\_\_\_\_\_

(e) Our Bid shall be valid for a period of . . . . . days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

(f) If our Bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents.



- (g) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: <sup>1</sup>

Name of Recipient	Address	Reason	Amount
.....	.....	.....	.....
.....	.....	.....	.....

- (h) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- (i) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
- (j) We agree to permit ADB or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by ADB.

Name .....

In the capacity of .....

Signed .....

Duly authorized to sign the Bid for and on behalf of .....

Date .....

<sup>1</sup> If none has been paid or is to be paid, indicate "None".

# Bid Security

## Bank Guarantee

*Bank's name, and address of issuing branch or office*<sup>1</sup>

**Beneficiary:** ..... *Name and address of employer* .....

**Date:** .....

**Bid Security No.:** .....

We have been informed that . . . . . *name of the bidder*. . . . . (hereinafter called "the Bidder") has submitted to you its bid dated . . . . . (hereinafter called "the Bid") 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 its Bid during the period of bid validity specified by the Bidder in the Letter of Technical Bid and Letter of Price 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, or (iii) fails or refuses to furnish the domestic preference security, if required.

This guarantee will expire (a) if the Bidder is the successful Bidder, upon our receipt of copies of the Contract Agreement signed by the Bidder and the Performance Security issued to you upon the instruction of the Bidder; and (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy your notification to the Bidder of the name of the successful Bidder, or (ii) 28 days after the expiration of the Bidder's bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.<sup>2</sup>

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

**Note**

*In case of a joint venture, the bid security must be in the name of all partners to the joint venture that submits the bid.*

<sup>1</sup> All italicized text is for use in preparing this form and shall be deleted from the final document.  
<sup>2</sup> Or 758 as applicable.

# Technical Proposal

## Personnel

### Form PER – 1: Proposed Personnel

Bidder should provide the details of the proposed personnel and their experience record in the relevant Information Forms below for each candidate:

1.	Title of position*
	Name
2.	Title of position*
	Name
3.	Title of position*
	Name
4.	Title of position*
	Name
etc.	Title of position*
	Name

**-- Note --**

\* As listed in Section 6 (Employer's Requirements).

**Form PER – 2: Resume of Proposed Personnel (Use one form for each position)**

The Bidder shall provide all the information requested below. Use one form for each position.

<b>Position</b>		
<b>Personnel information</b>	<b>Name</b>	<b>Date of birth</b>
	<b>Professional qualifications</b>	
<b>Present employment</b>	<b>Name of employer</b>	
	<b>Address of employer</b>	
	<b>Telephone</b>	<b>Contact (manager / personnel officer)</b>
	<b>Fax</b>	<b>E-mail</b>
	<b>Job title</b>	<b>Years with present employer</b>

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

<b>From</b>	<b>To</b>	<b>Company / Project / Position / Relevant Technical and Management Experience</b>

## Equipment

### Form EQU: Equipment

The Bidder shall provide adequate information and details to demonstrate clearly that it has the capability to meet the equipment requirements indicated in Section 6 (Employer's Requirements), using the Forms below. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

<b>Item of Equipment</b>		
<b>Equipment Information</b>	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
<b>Current Status</b>	Current location	
	Details of current commitments	
<b>Source</b>	Indicate source of the equipment <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured	

Omit the following information for equipment owned by the Bidder.

<b>Owner</b>	Name of owner	
	Address of owner	
	Telephone	Contact name and title
	Fax	Telex
<b>Agreements</b>	Details of rental / lease / manufacture agreements specific to the project	

**Site Organization**

**Method Statement**

**Mobilization Schedule**

**Construction Schedule**

## **Bidders Qualification**

To establish its qualifications to perform the contract in accordance with Section 3 (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder.

**Form ELI - 1: Bidder's Information Sheet**

<b>Bidder's Information</b>	
<b>Bidder's legal name</b>	
<b>In case of Joint Venture, legal name of each partner</b>	
<b>Bidder's country of constitution</b>	
<b>Bidder's year of constitution</b>	
<b>Bidder's legal address in country of constitution</b>	
<b>Bidder's authorized representative</b> (name, address, telephone numbers, fax numbers, e-mail address)	
<p><b>Attached are copies of the following documents.</b></p> <p><input type="checkbox"/> 1. In case of single entity, articles of incorporation or constitution of the legal entity named above, in accordance with ITB 4.1 and ITB 4.2.</p> <p><input type="checkbox"/> 2. Authorization to represent the firm or Joint Venture named above, in accordance with ITB 20.2.</p> <p><input type="checkbox"/> 3. In case of Joint Venture, letter of intent to form Joint Venture or Joint Venture agreement, in accordance with ITB 4.1.</p> <p><input type="checkbox"/> 4. In case of a government-owned enterprise, any additional documents not covered under 1 above required to comply with ITB 4.5.</p>	



**Form ELI - 2: Joint Venture Information Sheet**

Each member of the Joint Venture and Specialist Subcontractor must fill out this form separately.

<b>Joint Venture / Specialist Subcontractor Information</b>	
<b>Bidder's legal name</b>	
<b>Joint Venture Partner's or Specialist Subcontractor's legal name</b>	
<b>Joint Venture Partner's or Specialist Subcontractor's country of constitution</b>	
<b>Joint Venture Partner's or Specialist Subcontractor's year of constitution</b>	
<b>Joint Venture Partner's or Specialist Subcontractor's legal address in country of constitution</b>	
<b>Joint Venture Partner's or Specialist Subcontractor's authorized representative information</b> (name, address, telephone numbers, fax numbers, e-mail address)	
<p><b>Attached are copies of the following documents.</b></p> <p><input type="checkbox"/> 1. Articles of incorporation or constitution of the legal entity named above, in accordance with ITB 4.1 and ITB 4.2.</p> <p><input type="checkbox"/> 2. Authorization to represent the firm named above, in accordance with ITB 20.2.</p> <p><input type="checkbox"/> 3. In the case of government-owned enterprise, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB 4.5.</p>	

Specialist Subcontractor is a specialist enterprise engaged for highly specialized processes that cannot be provided by the main Contractor.

**Form FIN - 1: Historical Financial Performance**

Each Bidder must fill out this form.

In case of joint ventures, each Joint Venture Partner must fill out this form separately, and provide the Joint Venture Partner name below:

Joint Venture Partner: \_\_\_\_\_

<b>Financial Data for Previous ___ Years [NRs. Equivalent]</b>		
<b>Year 1:</b>	<b>Year 2:</b>	<b>Year ___:</b>

**Information from Balance Sheet**

<b>Total Assets (TA)</b>			
<b>Total Liabilities (TL)</b>			
<b>Net Worth = TA – TL</b>			
<b>Current Assets (CA)</b>			
<b>Current Liabilities (CL)</b>			
<b>Working Capital = CA - CL</b>			

<b>Most Recent Working Capital</b>		To be obtained for most recent year and carried forward to FIN-3 Line 1; in case of Joint Ventures, to the corresponding Joint Venture Partner's FIN-3.
------------------------------------	--	---

**Information from Income Statement**

<b>Total Revenues</b>			
<b>Profits Before Taxes</b>			
<b>Profits After Taxes</b>			

- Attached are copies of financial statements (balance sheets including all related notes, and income statements) for the last \_\_\_ years, as indicated above, complying with the following conditions.
- Unless otherwise required by Section 3 of the Bidding Document, all such documents reflect the financial situation of legal entity or entities comprising the Bidder and not the Bidder's parent companies, subsidiaries, or affiliates.
  - Historical financial statements must be audited by a certified accountant.
  - Historical financial statements must be complete, including all notes to the financial statements.
  - Historical financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

**Form FIN - 2: Average Annual Construction Turnover**

Each Bidder must fill out this form.

The information supplied should be the Annual Turnover of the Bidder or each member of a Joint Venture in terms of the amounts billed to clients for each year for work in progress or completed, converted to US Dollars at the specified exchange rate.

In case of joint ventures, each Joint Venture Partner must fill out this form separately, and provide the Joint Venture Partner name below:

Joint Venture Partner: \_\_\_\_\_

<b>Annual Turnover Data for the Last 7 Years (Construction only)</b>		
<b>Year</b>	<b>Amount Currency</b>	<b>NRs. Equivalent</b>
<b>Average Annual Construction Turnover</b> <b>(Best 3 years with in the last 7 years)</b>		

**Form FIN – 3: Availability of Financial Resources**

Bidder must demonstrate sufficient financial resources, usually comprising of Working Capital supplemented by credit line statements or overdraft facilities and others to meet the Bidder's financial requirements for

- (a) its current contract commitments, and
- (b) the subject contract.

In case of joint ventures, each Joint Venture Partner must fill out this form separately and provide the Joint Venture Partner name below:

Joint Venture Partner: \_\_\_\_\_

<b>Financial Resources</b>		
No.	Source of financing	Amount (NRs. equivalent)
1	Working Capital (to be taken from FIN-1)	
2	Credit Line <sup>a</sup>	
3	Other Financial Resources	
	Total Available Financial Resources	

<sup>a</sup> To be substantiated by a letter from the bank issuing the line of credit.

**Form FIN- 4: Financial Resources Requirement**

Bidders (or each Joint Venture partner) should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

In case of joint ventures, each Joint Venture Partner must fill out this form separately and provide the Joint Venture Partner name below:

Joint Venture Partner: \_\_\_\_\_

<b>Current Contract Commitments</b>						
No.	Name of Contract	Employer's Contact (Address, Tel, Fax)	Contract Completion Date	Outstanding Contract Value <sup>a</sup> (X)	Remaining Contract Period <sup>b</sup> in months (Y)	Monthly Financial Resources Requirement (X / Y)
1						
2						
3						
4						
Total Monthly Financial Requirements for Current Contract Commitments						NRs. 45,500,000 (or equivalent )

**Note:**

- a. Remaining outstanding contract value to be calculated from 28 days prior to the bid submission deadline.
- b. Remaining contract period to be calculated from 28 days prior to the bid submission deadline.

**Form FIN - 5: Compliance Check of Financial Resources (Criterion 2.3.3 of Section 3)**

**Form FIN-5A: For Single Entities**

For Single Entities:	Total Available Financial Resources from FIN-3 (C)	Total Monthly Financial Requirement for Current Contract Commitments (CCC) from FIN-4 (D)	Available Financial Resources net of CCC (C-D)	≥	Requirement <sup>a</sup>
_____ (Name of Bidder)	_____	_____	_____	≥	100% of Requirement from Section 3 - 2.3.3(b)

**Form FIN-5B: For Joint Ventures**

For Joint Ventures:	Total Available Financial Resources from FIN-3 (C)	Total Monthly Financial Requirement for Current Contract Commitments (CCC) from FIN-4 (D)	Available Financial Resources net of CCC (C-D)	≥	Requirement <sup>a</sup>
One Partner:					
_____ (Name of Partner)	_____	_____	_____	≥	B(%) of Requirement
Each (Other) Partner:					
_____ (Name of Partner 1)	_____	_____	_____	≥	A(%) of Requirement
_____ (Name of Partner 2)	_____	_____	_____	≥	A(%) of Requirement
_____ (Name of Partner 3)	_____	_____	_____	≥	A(%) of Requirement
<b>All partners combined</b>			$\Sigma (C-D)^b =$ _____	≥	100% of Requirement from Section 3 - 2.3.3(b)

Form FIN - 5 is made available for use by the bidder as a self-assessment tool, and by the employer as evaluation work sheet, to determine compliance with financial resources.

<sup>a</sup> Requirement for the subject contract is defined in Criterion 2.3.3(b) of Section 3. Value A is the required percentage of the subject contract, which each partner must meet; and value B is the required percentage of the subject contract, which one partner must meet. A and B values are defined in Criterion 2.3.3 of Section 3 (Evaluation and Qualification Criteria).

<sup>b</sup>  $\Sigma (C - D) =$  sum of available financial resources net of current contract commitments (CCC) for all partners.

**Form EXP – 1: Contracts of Similar Size and Nature**

Fill up one (1) form per contract.

Contract of Similar Size and Nature		
Contract No . . . . . of . . . . .	Contract Identification	
Award Date	Completion Date	
Total Contract Amount	US\$	
If partner in a Joint Venture or subcontractor, specify participation of total contract amount	Percent of Total	Amount
Employer's Name Address Telephone/Fax Number E-mail		
Description of the similarity in accordance with Criterion 2.4.1 of Section 3		
The contracts of similar size includes construction of micro/mini/small hydro projects, any irrigation project with construction of headworks and lined irrigation canal and any water supply projects with construction of intakes, water retaining structures, canal or pipe lines.		

**Form EXP - 2: Construction Experience in Key Activities**

Fill up one (1) form per contract.

Contract with Similar Key Activities		
Contract No ..... of .....	Contract Identification	
Award Date	Completion Date	
Total Contract Amount		
If partner in a Joint Venture or subcontractor, specify participation of total contract amount	Percent of Total	Amount
Employer's Name Address Telephone Number Fax Number E-mail		
Description of the key activities in accordance with Criterion 2.4.2 of Section 3		
1. Construction of civil work ( e.g. Headworks, Headrace Canal, Penstock, Power house) related to hydro power plant of > or = 50 kW each and Cumulative total capacity of Project t> or = 300 kw		
2. Supply and installation of all Electromechanical equipment for a hydro electric plant of > or = 50 kW each and Cumulative total capacity of Project > or = 300 kw		
3. Supply and installation of all Hydromechanical equipment for a hydro electric plant of > or = 50 kW each and Cumulative total capacity of Project > or = 300 kw		
4. Supply and installation of 11 kV or greater electric power transmission and distribution line at least 6 km		



# Bill of Quantities

## [Admeasurement Contract]

### Preamble of Bill of Quantities

#### A. General

1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Special Conditions of Contract, Technical Specifications, and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Project Manager and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Project Manager may fix within the terms of the Contract.
3. For any item for which measurement is based on records made before or during construction the records shall be prepared and agreed between the Project Manager and the Contractor. Should the Contractor carry out such work without the prior approval of the Project Manager, the Project Manager may request the Contractor to carry out investigations to confirm the extent of the work and the quantity of work certified for payment shall be solely at the Project Manager's discretion. The cost of any such investigation shall be borne by the Contractor.
4. The rates and prices bid in the priced Bill of Quantities shall, except as otherwise provided under the Contract, include all construction equipment, labor, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.
5. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
6. The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bill of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
7. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities. The Specification Clause references where given in the item description of the Bills of Quantities are for the convenience of bidders and generally refer to the principal relevant- specification clause but do not necessarily represent the whole of the specification requirements for the work required within the item. The presence of a Specification clause reference shall not in any way reduce the Bidders obligation to complete work in accordance with all the requirements of the Specification.
8. Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Project Manager in accordance with the Conditions of Contract.

9. The method of measurement of completed work for payment of civil works shall be admeasurement in accordance with the Specifications.
10. For electro mechanical, hydro mechanical equipment and electrical transmission/distribution line, the payment will be included in IPC as follows:
- i. Up to 75 % of BOQ item cost after site delivery and inspection/acceptance of goods by the Project Manager and could be divided into maximum of two payments.
  - ii. Up to 15% After installation, testing, commissioning and approval of Testing and Commissioning report by the Project Manager
  - iii. Up to 10% after approval/acceptance of Power output Verification (POV) report by the Project Manager
  - iv. Performance guarantee will be released after successful completion of warranty period.
  - v. Payment of operation and maintenance cost will be made as per IPC submitted during O/M period.
11. Rock is defined as all materials that, in the opinion of the Project Manager, require blasting, or the use of metal wedges and sledgehammers, or the use of compressed air drilling for their removal, and that cannot be extracted by ripping with a tractor of at least 150 brake hp with a single, rear-mounted, heavy-duty ripper.

## **B. Day work Schedule**

### **a) General**

1. Work shall not be executed on a day work basis except by written order of the Project Manager. Bidders shall enter basic rates for day work items in the Schedules. These rates shall apply to any quantity of day work ordered by the Project Manager. Nominal quantities have been indicated against each item of day work, and the extended total for day work shall, be carried forward as a Provisional Sum to the Summary Total Bid Amount. Unless otherwise adjusted, payments for day work shall be subject to price adjustment in accordance with the provisions in the Conditions of Contract.

### **b) Day work Labor**

1. In calculating payments due to the Contractor for the execution of day works, the hours for labor will be reckoned from the time of arrival of the labor at the job site to execute the particular item of day work to the time of departure from the job site, but excluding meal breaks and rest periods. Only the time of classes of labor directly doing work ordered by the Project Manager and are competent to perform such work will be measured. The time of gangers (charge hands) actually doing work with the gangs will also be measured but not the time of foremen or other supervisory personnel.
2. The Contractor shall be entitled to payment in respect of the total time that labor is employed on day work, calculated at the basis rates entered by it in the " SCHEDULE OF DAY WORK RATES: 1. LABOR". The rates for labor shall be deemed to cover all costs to the Contractor including (but not limited to) i) the amount of wages paid to such labor, transportation time, overtime, subsistence allowances, ii) any sums paid to or on behalf of such labor for social benefits in accordance with Nepal law, iii) Contractor's profit, overheads, superintendence, liabilities and insurance and iv) charges incidental to the foregoing.

### **c) Day work Equipment**

1. The Contractor shall be entitled to payments in respect of Constructional Plant already on site and employed on day work at the basis rental rates entered by him in the "SCHEDULE OF DAY WORK RATES:2 EQUIPMENT ". The said rates shall be deemed to include due and complete allowance for depreciation, interest, indemnity and insurance, repairs, maintenance, supplies, fuel, lubricant, and other consumables and all overhead, profit and administrative costs related to the use of such equipment. The cost of drivers, operators and assistants also shall be included in the rate of the equipment and no separately payment shall

be made for it.

2. In calculating the payment due to the Contractor for Constructional Plant employed on day work, only the actual number of working hours will be eligible for payment, except that where applicable and agreed with the Project Manager, the travelling time from the part of the Site where the Construction Plant was located when ordered by the Project Manager to be employed on day work and the time for return journey there to shall be included for payment.

**d) Day work Materials**

1. The Contractor shall be entitled to payment in respect of materials used for day work (except for materials for which the cost is included in the percentage addition to labor costs as detailed heretofore), at the rates entered by him in the "SCHEDULE OF DAY WORK RATES: 3 MATERIALS" and shall be deemed to include overhead charges and profit as follows;
  - (i) the rates for materials shall be calculated on the basis of the invoiced price, freight, insurance, handling expenses, damage, losses, etc. and shall provide for delivery to store for stockpiling at the Site.
  - (ii) the cost of hauling materials for use on work ordered to be carried out as day work, from the store or stockpile on the Site to the place where it is to be used also shall be include in the same rate.

**C. Provisional Sums**

The Provisional Sum will be used for payment of goods/works to be procured as directed by the Project Manager.

Each Provisional Sum shall only be used, in whole or in part, in accordance with the Project Manager's instructions. The total sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Project Manager shall have instructed. For each Provisional Sum, the Project Manager may instruct:

- (a) work to be executed (including Plant, Materials or services to be supplied) by the Contractor
- (b) Plant, Materials or services to be purchased by the Contractor

(C) The Contractor will be claim actual amounts paid (or due to be paid) by the Contractor, and a sum (10% of Claim amount) for overhead charges and profit, calculated as a percentage of these actual amounts stated in the appropriate Schedule. The Contractor shall, when required by the Engineer, produce quotations, invoices, vouchers and accounts or receipts in substantiation

**Bill of Quantities**  
(Attached herewith)

<b>Aankhe KholaMini Hydropower Project</b>		
Thulibheri Municipality, Dolpa District		
<b>Summary of Cost</b>		
Capacity	750	kW

S.No	General Summary	Amount NRS
<b>A.</b>	<b>GENERAL ITEMS</b>	
1	Bill NO. 01 : GENERAL ITEMS	
<b>B.</b>	<b>CIVIL COMPONENTS</b>	
2	Bill NO. 02 : RIVER DIVERSION WORKS DURING CONSTRUCTION	
3	Bill NO. 03 - WEIR , SLUICE WAYS AND FLOOD WALL	
4	Bill NO. 04 -INTAKE AND GRAVEL TRAP	
5	Bill NO. 05 -SETTLING BASIN WITH FLUSHING CANAL	
6	Bill NO. 06 : PENSTOCK PIPE ALIGNMENT CIVIL WORKS	
7	Bill NO. 07: POWERHOUSE/CONTROL BUILDING	
8	Bill NO. 08: OPERATOR'S RESIDENTIAL BUILDING	
9	Bill NO. 09 : TAILRACE CANAL	
10	Bill NO. 10 : SWITCHYARD CIVIL WORKS	
<b>C.</b>	<b>HYDROMECHANICAL COMPONENT</b>	
11	Bill NO. 11 : HYDROMECHANICAL	
<b>E</b>	<b>ELECTROMECHANICAL COMPONENT</b>	
12	Bill NO. 12 : ELECTROMECHANICAL	
<b>F</b>	<b>TRANSMISSION LINE</b>	
13	Bill NO. 13: TRANSMISSION LINE WORKS	
<b>F</b>	<b>ENVIRONMENTAL MITIGATION AND MONITORING, PROVISIONAL SUM</b>	
14	Bill NO.14 : ENVIRONMENTAL MITIGATION AND MOINITORING WORKS	
<b>G</b>	<b>SCHEDULE OF DAY WORKS</b>	
15	Bill NO. 15 : SCHEDULE OF DAY WORKS	
<b>G</b>	<b>OPERATION AND MAINTANANCE</b>	
16	Bill NO.16 : OPERATION AND MAINTANANCE	
<b>Sub Total of Bills</b>		<b>I</b>
Contengency of I		<b>II</b>
<b>Grand Sub Total (I+II)</b>		<b>III</b>
VAT 13% of III		<b>IV</b>
<b>GRAND TOTALS ( III + IV)</b>		<b>V</b>
		<b>9,626,694</b>

**BILL OF QUANTITIES****Bill NO.01 : GENERAL ITEMS**

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
101	Insurance for loss of or damage to the Works, Plant, and Materials, loss of or damage to Equipment, loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract and personal injury or death as per GCC 19	PS	1	1,400,000	One Million Four Hundred Thousand Rupees and No Paisa	1,400,000
102	Facilities to the Employer (Office equipment i.e. 17 Laptop and A3 Canon laser printer and 500 W Solar power system with all asesories ) as per Technical Specification Section I, Part G - Specification of General Item	PS	1	250,000	Two Hundred Fifty Thousand Rupees and No Paisa	250,000
103	Laboratory facilities as per Technical Specification Section I- Part G Specification of General Item with establishment of testing laboratory at site including furnishing and supply of testing equipments, apparatus including those for required meteorological measurement as per the Specifications	LS	1			
<b>TOTAL OF item 1 general item</b>						
<b>Total of Bill No. 1</b>						

## BILL OF QUANTITIES

### Bill NO. 02 : RIVER DIVERSION WORKS DURING CONSTRUCTION

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
201	Excavation and Transport of boulder mixed soil including loading and dumping to the disposal area within 100 m including all safety precautions for phase 1. This also includes Making Bunds with river Materials, Supply and laying of Geotextile materials, Dewatering/Draining Works and other works as required.	1.00	LS			
202	Excavation and Transport of boulder mixed soil including loading and dumping to the disposal area within 100 m including all safety precautions for Phase 2. This also includes Removal of Phase 1 River diversion material and other works as specified in Phase 1	1.00	LS			
<b>TOTAL OF Item 2 River Diversion Works</b>						
<b>Total of Bill No. 2</b>						

**BILL OF QUANTITIES**

Ref. Dwg No. :

**Bill NO. 03 - WEIR , SLUICE WAYS AND FLOOD WALL**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
<b>301</b>	<b><u>SITE CLEARANCE</u></b>					
301.1	Preparation of construction area by clearing, grubbing and stripping. Tree trunks, bushes and shrubs to be loaded, transported, dumped and stockpiled	305.00	m <sup>2</sup>			
<b>302</b>	<b><u>EARTHWORK IN EXCAVATION</u></b>					
302.1	Excavation and Transport of boulder mixed soil including loading and dumping to the disposal area within 50 m including all safety precautions.	350.00	m <sup>3</sup>			
302.2	Excavation and Transport of medium rock including loading and dumping to the disposal area within 50 m including all safety precautions.	100.00	m <sup>3</sup>			
302.3	Excavation and Transport of large boulder including loading and dumping to the disposal area within 50 m including all safety precautions.	15.00	m <sup>3</sup>			
<b>303</b>	<b><u>BACKFILLING</u></b>					
303.1	Filling with ordinary soils in 15cm thick layers and hand compaction with sprinkling water	93.00	m <sup>3</sup>			
<b>304</b>	<b><u>CONCRETE WORK</u></b>					



**Bill NO. 03 - WEIR , SLUICE WAYS AND FLOOD WALL**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
304.1	Manual Mixed Concrete works (Supply of materials & haulage dist up to 30 m) in blinding concrete and mass infilling concrete with concrete grade M10	17.00	m <sup>3</sup>			
304.2	Manual Mixed Concrete works for the abutement, pier, wall etc including compaction, curing, testing and lead 30 m etc. all complete as per the specifications and drawings Concrete grade M20	230.00	m <sup>3</sup>			
304.3	Manual Mixed Concrete works for the abutement, pier, wall etc including compaction, curing, testing and lead 30 m etc. all complete as per the specifications and drawings Concrete grade M25	79.60	m <sup>3</sup>			
<b>305</b>	<b><u>FORMWORK</u></b>					
305.1	Providing, preparing and installing formwork including necessary supports and removing after completion and all complete works as per the Specifications, drawing and instruction of the Engineer, Straight formwork upto 5m	348.49	m <sup>2</sup>			
<b>306</b>	<b><u>REINROCEMENT</u></b>					
306.1	Providing and laying reinforcement including cutting, bending, binding, fixing in position and all complete works as per the Drawings, Specifications and instruction of the Engineer	13,644.00	Kg.			

**Bill NO. 03 - WEIR , SLUICE WAYS AND FLOOD WALL**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
<b>307</b>	<b><u>STONE WORK</u></b>					
307.1	Stone soling works by min. 250 mm stones in the foundation with sand and leveling including haulage	207.26	m <sup>3</sup>			
307.2	Rubble masonry works in 1:6 cement mortar including supply of hard stone blocks, preparing cement mortar and construction of wall	191.10	m <sup>3</sup>			
<b>308</b>	<b><u>Hard Stone Lining Works</u></b>					
308.1	Providing and laying 0.3m*0.3m*0.3 m hard stone lining at 1:2 Cement Sand Mortar	4.87	m <sup>3</sup>			
<b>309</b>	<b><u>DRY BOULDER RIP RAP</u></b>					
309.1	1m dia Boulder Riprap from upstream river boulders including transportation, leveling including haulage.	247.00	m <sup>2</sup>			
<b>310</b>	<b><u>GABION WOKS MAKING: GABION INCLUDING SUPPLYING OF MATERIALS, PLACING AND FILLING WITH STONES ALL COMPLETE.</u></b>					
310.1	Box size (3 m x 1 m x 1 m, 2 m x 1 m x 1 m )	6	m <sup>3</sup>			
<b>311</b>	<b><u>MISCELLANEOUS</u></b>					
311.1	Supply delivey and fixing of steel railing with 2" vertival post @ 2 m c/c and hand rail with 1" dia 3 layers horizontal pipe with one coat primer and two coat enamel paints	20	rm			

**Bill NO. 03 - WEIR , SLUICE WAYS AND FLOOD WALL**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
311.2	Supply delivey and fixing of Metal Staircase for access to Undersluice Platform with 2 m width and 1m high handrails.	1	LS			
<b>TOTAL OF Item 3 Weir, Sluice Ways and Food Wall</b>						
<b>Total of Bill No. 3</b>						

**BILL OF QUANTITIES**

Ref. Dwg No. :

**Bill NO. 04 -INTAKE AND GRAVEL TRAP**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
<b>401</b>	<b><u>EARTHWORK IN EXCAVATION</u></b>					
401.1	Excavation and Transport of boulder mixed soil including loading and dumping to the disposal area within 50 m including all safety precautions.	60.10	m <sup>3</sup>			
<b>402</b>	<b><u>BACKFILLING</u></b>					
402.1	Filling with ordinary soils in 15cm thick layers and hand compaction with sprinkling water	24.04	m <sup>3</sup>			
<b>403</b>	<b><u>CONCRETE WORK</u></b>					
403.1	Manual Mixed Concrete works for the abutment, pier, wall etc including compaction, curing, testing and lead 30 m etc. all complete as per the specifications and drawings Concrete grade M20	37.00	m <sup>3</sup>			
403.2	Manual Mixed Concrete works (Supply of materials & haulage dist up to 30 m) in blinding concrete and mass infilling concrete with concrete grade M10	1.90	m <sup>3</sup>			
<b>404</b>	<b><u>FORMWORK</u></b>					

**Bill NO. 04 -INTAKE AND GRAVEL TRAP**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
404.1	Providing, preparing and installing formwork including necessary supports and removing after completion and all complete as per the Specifications, drawing and instruction of the Engineer, For straight formwork upto 3 m high	187.80	m <sup>2</sup>			
<b>405</b>	<b><u>REINROCEMENT</u></b>					
405.1	Providing and laying reinforcement including cutting, bending, binding, fixing in position and all complete works as per the Drawings, Specifications and instruction of the Engineer	6,028	Kg.			
<b>406</b>	<b><u>STONE WORK</u></b>					
406.1	Providing and laying of Stone Soling works with 250 mm stones in the foundation and leveling including haulage	6.14	m <sup>3</sup>			
<b>407</b>	<b><u>EXPANSION JOINT</u></b>					
407.1	Providing and laying of 230 mm Water bars, Joint fillers and Water sealeant all complete	7.60	rm			
<b>408</b>	<b><u>GABION WOKS MAKING: GABION INCLUDING SUPPLYING OF MATERIALS, PLACING AND FILLING WITH STONES ALL COMPLETE.</u></b>					

**Bill NO. 04 -INTAKE AND GRAVEL TRAP**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
408.1	Box size (3 m x 1 m x 1 m or 2 m x 1 m x 1 m )	36.0	m <sup>3</sup>			
<b>TOTAL of Item 4 Intake and Gravel Trap</b>						

Total of Bill No. 4

# BILL OF QUANTITIES

Ref. Dwg No. :

**Bill NO. 05 -SETTLING BASIN WITH FLUSHING CANAL**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
<b>501</b>	<b><u>EARTHWORK IN EXCAVATION</u></b>					
501.1	Excavation and Transport of soft soil including loading and dumping to the disposal area within 50 m including all safety precautions.	76.50	m <sup>3</sup>			
501.2	Excavation and Transport of boulder mixed soil including loading and dumping to the disposal area within 50 m including all safety precautions.	76.50	m <sup>3</sup>			
<b>502</b>	<b><u>BACKFILLING</u></b>					
502.1	Filling with ordinary soils in 15 cm thick layers and hand compaction (haulage distance 10 m ) With sprinkling water	45.90	m <sup>3</sup>			
<b>503</b>	<b><u>CONCRETE WORK</u></b>					
503.1	Manual Mixed Concrete works (Supply of materials & haulage dist up to 30 m) in blinding concrete and mass infilling concrete with concrete grade M10	8.61	m <sup>3</sup>			
503.2	Hand Mixed Concrete works for the abutement, pier, wall etc including compaction, curing, testing and lead 30 m etc. all complete as per the specifications and drawings Concrete grade M20	88.21	m <sup>3</sup>			
<b>504</b>	<b><u>FORMWORK</u></b>					

**Bill NO. 05 -SETTLING BASIN WITH FLUSHING CANAL**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
504.1	Providing, preparing and installing formwork including necessary supports and removing after completion and all complete works as per the Specifications, drawing and instruction of the Engineer, Straight formwork upto 3 m high	326.94	m <sup>2</sup>			
<b>505</b>	<b><u>REINROCEMENT</u></b>					
505.1	Providing and laying reinforcement including cutting, bending, binding, fixing in position and all complete works as per the Drawings, Specifications and instruction of the Engineer	5,900	Kg.			
<b>506</b>	<b><u>STONE WORKS</u></b>					
506.1	Preparation of sub grade formation and Dry stone soling of 250mm thick stone with leveled surface as per design and drawings.	28.70	m <sup>3</sup>			
506.2	Rubble masonry works in 1:6 cement mortar including supply of hard stone blocks, preparing cement mortar and construction of wall	31.20	m <sup>3</sup>			
<b>507</b>	<b><u>EXPANSION JOINT</u></b>					
507.1	Providing and laying of 250 mm Water bars, Joint fillers and Water sealeant all complete	28.10	Rm			
<b>508</b>	<b><u>MISCELLANEOUS</u></b>					



**Bill NO. 05 -SETTLING BASIN WITH FLUSHING CANAL**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
508.1	Chainlink wiremess of size 2"x2' with Iron Angle post 50mmX50mm at interval of 2m of height 1.5 m with enamel paint all complete set	75.00	rm			
508.2	Supply delivey and fixing of stainless steel railing with 2" vertival post @ 2 m c/c and hand rail with 1" dia 3 layers horizontal pipe	22.50	rm			
509	<b><u>GABION WOKS MAKING: GABION INCLUDING SUPPLYING OF MATERIALS, PLACING AND FILLING WITH STONES ALL COMPLETE.</u></b>					
509.1	Box size ( 2 m x 1 m x 1 m)	4.00	m <sup>3</sup>			
<b>TOTAL OF Item 5 Settling Basin with Flushing Canal</b>						
<b>Total of Bill No. 5</b>						

**BILL OF QUANTITIES**

Ref. Dwg No. :

**Bill NO. 06 : PENSTOCK PIPE ALIGNMENT CIVIL WORKS**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
<b>601</b>	<b><u>SITE CLEARANCE</u></b>					
601.1	Preparation of construction area by clearing, grubbing and stripping. Tree trunks, bushes and shrubs to be loaded, transported, dumped and stockpiled	1,200	m <sup>2</sup>			
<b>602</b>	<b><u>EARTHWORK IN EXCAVATION</u></b>					
602.1	Excavation and Transport of boulder mixed soil including loading and dumping to the disposal area within 50 m including all safety precautions.	1,757.84	m <sup>3</sup>			
602.2	Excavation and Transport of Soft/medium Rock including loading and dumping to the disposal area within 20 m including all safety precautions.	20.00	m <sup>3</sup>			
<b>603</b>	<b><u>BACKFILLING WORKS</u></b>					
603.1	Filling with ordinary soils in 15 cm thick layers and hand compaction (haulage distance 10 m ) With sprinkling water	712.00	m <sup>3</sup>			
<b>604</b>	<b><u>CONCRETE WORKS</u></b>					

**Bill NO. 06 : PENSTOCK PIPE ALIGNMENT CIVIL WORKS**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
604.1	Manual Mixed Concrete works (Supply of materials & haulage dist up to 30 m) in blinding concrete with concrete grade M10	44.39	m <sup>3</sup>			
604.2	Providing and Laying machine mixed Concrete grade M15 (Nominal mixed 1:2:4) with skin reinforcement concrete and 40% plum inside	201.00	m <sup>3</sup>			
<b>605</b>	<b><u>FORMWORK</u></b>					
605.1	Providing, preparing and installing formwork including necessary supports and removing after completion and all complete works as per the Specifications, drawing and instruction of the Engineer, For straight formwork 5 m high	295.95	m <sup>2</sup>			
<b>606</b>	<b><u>REINFORCEMENT</u></b>					
606.1	Providing and laying reinforcement including cutting, bending, binding, fixing in position and all complete works as per the Drawings, Specifications and instruction of the Engineer	4,800	kg			
<b>607</b>	<b><u>STONE WORK</u></b>					
607.1	Preparation of sub grade formation and Dry stone soling of 250mm thick stone with leveled surface as per design and drawings.	49.36	m <sup>3</sup>			

**Bill NO. 06 : PENSTOCK PIPE ALIGNMENT CIVIL WORKS**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
607.2	Providing and Laying of Dressed / Rubble stone masonry with 1:6 cement sand mortar mortar with haulage distance upto 10m	103.20	m <sup>3</sup>			
<b>TOTAL OF Item 6 Penstock Civil works</b>						
<b>Total of Bill No. 6</b>						

**BILL OF QUANTITIES**

Ref. Dwg No. :

**Bill NO. 07: POWERHOUSE/CONTROL BUILDING**

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
<b>1001</b>	<b><u>SITE CLEARANCE</u></b>					
1001.1	Preparation of construction area by clearing, grubbing and stripping. Tree trunks, bushes and shrubs to be loaded, transported, dumped and stockpiled	350.00	m <sup>2</sup>			
<b>702</b>	<b><u>EARTHWORK</u></b>					
702.1	Excavation and Transport of boulder mixed soil including loading and dumping to the disposal area within 50 m including all safety precautions.	893.99	m <sup>3</sup>			
702.2	Breaking boulder with breaker for boulder size more than 1.5 m size or using chemicals as per requirements.	15.00	m <sup>3</sup>			
<b>703</b>	<b><u>COMPACTED BACKFILLING</u></b>					
703.1	Compacting soils by roller in 20 cm thick layers- Using RCC hand roller	363.60	m <sup>3</sup>			
<b>704</b>	<b><u>CONCRETING WORK</u></b>					
704.1	Manual Mixed Concrete works (Supply of materials & haulage dist up to 30 m) in blinding concrete with concrete grade M10	22.40	m <sup>3</sup>			

**Bill NO. 07: POWERHOUSE/CONTROL BUILDING**

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
704.2	Manual Mixed Concrete works for the column, foundation, beam corbel, machine foundation etc including compaction, curing, testing and lead 30 m etc. all complete as per the specifications and drawings Concrete grade M20	202.30	m <sup>3</sup>			
<b>705</b>	<b><u>FORMWORK</u></b>					
705.1	Providing, preparing and installing formwork including necessary supports and removing after completion and all complete works as per the Specifications, drawing and instruction of the Engineer, For straight formwork 5 m high	928.90	m <sup>2</sup>			
<b>706</b>	<b><u>REINFORCEMENT</u></b>					
706.1	Providing and laying reinforcement including cutting, bending, binding, fixing in position and all complete works as per the Drawings, Specifications and instruction of the Engineer	27,760.00	kg			
<b>707</b>	<b><u>BLOCK CONCRETE MASHONARY WORKS</u></b>					
707.1	Providing and Laying Block Masonary wall in 1:4 c/s mortar in line and plumb as per drawign, specification and instructiton of the engineer.	46.90	m <sup>2</sup>			

**Bill NO. 07: POWERHOUSE/CONTROL BUILDING**

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
<b>708</b>	<b><u>STONE WORK</u></b>					
708.1	Preparation of sub grade formation and Dry stone soling of 250mm thick stone with leveled surface as per design and drawings.	63.45	m <sup>3</sup>			
708.2	Providing and Laying of Dressed / Rubble stone masonry with 1:6 cement sand mortar mortar with haulage distance upto 10m	40.50	m <sup>3</sup>			
<b>709</b>	<b><u>PLASTERING WORKS</u></b>					
709.1	Providing and applying 20 mm thick cement plaster including mortar mixing, scaffolding, curing etc complete as per specification lead 30 m (manual mixing), Cement sand: 1:4	910.50	m <sup>2</sup>			
<b>710</b>	<b><u>DOOR &amp; WINDOW OPENINGS</u></b>					
710.1	Providing , Febricating and Installation of Local Hard wood Frame works for doors and windows with all complete	1.48	m <sup>3</sup>			
710.2	Supplying, Providing , Febricating and Installation of Pannel door Shutter of 38 mm solid core	2.50	m <sup>2</sup>			
710.3	Providing , Febricating and Installation of glazed Shutter with 4mm thick float glass in 38 x 75 mm sisauwood frame for Windows (based on shutter size 1.829 x 1.22 = 2.23 sqm)	29.02	m <sup>2</sup>			

**Bill NO. 07: POWERHOUSE/CONTROL BUILDING**

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
<b>711</b>	<b><u>ROOFING</u></b>					
711.1	Providing 24 gauge CGI colour sheet Roofing with 22 x 24 SWG Nut bolts, 8 mm J hooks, bitumen washers including GI plain sheet at ridge all complete	286.00	m <sup>2</sup>			
711.2	Manufacture, supply and Fixing of steel roof truss (including nut bolts, primer paints completed in all respects) as per drawings and specification	2700.00	kg			
711.3	Manufacture, supply and Fixing of steel purlins for roof truss (including nut bolts, primer paints completed in all respects) as per drawings and specification	3042.00	kg			
<b>712</b>	<b><u>PAINTING WORKS</u></b>					
712.1	With two coats of Primer and 2 coats of distemper at internal surface	415.70	m <sup>2</sup>			
712.2	With two coats of Primer and 2 coats of Weathercoat at exterior surface	455.30	m <sup>2</sup>			
<b>713</b>	<b><u>MISCELLANEOUS</u></b>					
713.1	Supply, erection and installation of mild steel rolling shutters with all required accessories and support, two coats of paint, complete in all respects with approval from Engineer	14.40	m <sup>2</sup>			-



**Bill NO. 07: POWERHOUSE/CONTROL BUILDING**

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
713.2	Provision for toilet (a pan with flushing system, wash basin, pipes and fittings for above,1000lt WaterTank, 6" dia HDP pipe, and septic tank of size 2*1.5*1.5m with stone masonry and RCC cover including excavation, backfilling etc) all complete	1.00	LS			
713.3	Barbed wire fencing works with five rows and two diagonal barbed wires and column at 2m spacing ,size of conc poles is 100 mm * 150 mm * 2100 mm including a wooden gate all complete with locking system	125.00	rm			
<b>TOTAL OF Item 7 Powerhouse</b>						
<b>Total of Bill No. 7</b>						

**BILL OF QUANTITIES**

Ref. Dwg No. :

**Bill NO. 08: OPERATOR'S RESIDENTIAL BUILDING**

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
<b>801</b>	<b><u>SITE CLEARANCE</u></b>					
801.1	Preparation of construction area by clearing, grubbing and stripping. Tree trunks, bushes and shrubs to be loaded, transported, dumped and stockpiled	90.44	m <sup>2</sup>			
<b>802</b>	<b><u>EARTHWORK</u></b>					
802.1	Excavation and Transport of boulder mixed soil including loading and dumping to the disposal area within 50 m including all safety precautions.	88.85	m <sup>3</sup>			
<b>803</b>	<b><u>COMPACTED BACKFILLING</u></b>					
803.1	Compacting soils by roller in 20 cm thick layers- Using RCC hand roller	44.43	m <sup>3</sup>			
<b>804</b>	<b><u>STONE WORK</u></b>					
804.1	Preparation of sub grade formation and Dry stone soling of 250mm thick stone with leveled surface as per design and drawings.	14.61	m <sup>3</sup>			
804.2	Providing and Laying of Dressed / Rubble stone masonry with 1:6 cement sand mortar mortar with haulage distance upto 10m	105.00	m <sup>3</sup>			

**Bill NO. 08: OPERATOR'S RESIDENTIAL BUILDING**

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
<b>805</b>	<b><u>CONCRETING WORK</u></b>					
805.1	Providing and Laying Manual mixed Concrete Grade M10 (Nominal mix 1:3:6 ) for (Supply of materials & haulage dist up to 30 m) in blinding concrete	9.72	m <sup>3</sup>			
805.2	Providing and Laying Manual Mixed Concrete works for the column, foundation, beam corbel, machine foundation etc including compaction,curing,testing and lead 30 m etc. all complete as per the specifications and drawings Concrete grade M20 (1:1.5:3)	8.60	m <sup>3</sup>			
<b>806</b>	<b><u>FORMWORK</u></b>					
806.1	Providing, preparing and installing formwork including necessary supports and removing after completion and all complete works as per the Specifications, drawing and instruction of the Engineer	48.98	m <sup>2</sup>			
<b>807</b>	<b><u>REINFORCEMENT</u></b>					
807.1	Providing and laying reinforcement including cutting, bending, binding, fixing in position and all complete works as per the Drawings, Specifications and instruction of the Engineer	1000	kg			
<b>808</b>	<b><u>PLASTERING WORKS</u></b>					

**Bill NO. 08: OPERATOR'S RESIDENTIAL BUILDING**

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
808.1	Providing and applying 20 mm thick cement plaster including mortar mixing, scaffolding, curing etc complete as per specification lead 30 m (manual mixing), Cement sand: 1:4	135.19	m <sup>2</sup>			
<b>809</b>	<b><u>DOOR &amp; WINDOW OPENINGS</u></b>					
809.1	Providing , Fabricating and Installation of Local Hard wood Frame works for doors and windows with all complete	1.84	m <sup>3</sup>			
809.2	Supplying, Providing , Fabricating and Installation of Pannel door Shutter of 38 mm solid core	3.81	m <sup>2</sup>			
809.3	Making and fitting 4mm glazed shutter in 38 x 75 mm Sal wood frame for window	9.03	m <sup>2</sup>			
<b>810</b>	<b><u>POINTING WORKS</u></b>					
810.1	Providing and pointing of Flush ruled Pointing works of 20 mm thick 1:3 cement sand mortar	108.00	m <sup>2</sup>			
<b>811</b>	<b><u>ROOFING</u></b>					
811.1	Providing 24 gauge CGI colour sheet Roofing with 22 x 24 SWG Nut bolts, 8 mm J hooks, bitumen washers including GI plain sheet at ridge all complete	116.80	m <sup>2</sup>			
811.2	Manufacture, supply and Fixing of steel roof truss (including nut bolts, primer paints completed in all respects) as per drawings and specification	321.92	kg			

**Bill NO. 08: OPERATOR'S RESIDENTIAL BUILDING**

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
811.3	Manufacture, supply and Fixing of steel purlins for roof truss (including nut bolts, primer paints completed in all respects) as per drawings and specification	814.68	kg			
<b>812</b>	<b><u>PAINTING WORKS</u></b>					
812.1	With two coats of Primer and 2 coats of distemper at internal surface	135.19	m <sup>2</sup>			
<b>813</b>	<b><u>Screeding and Puning</u></b>					
813.1	50mm thick Screeding in 1:2:4 cement sand ratio with 3mm thick punning in 1:1 ratio	71.11	m <sup>2</sup>			
<b>814</b>	<b><u>MISCELLANEOUS</u></b>					
814.1	Supply, erection and installation of metallic name plates of project and cooperative with approval from Engineer	1.0	LS			-
814.2	Supply and installation of wooden flush ply ceiling with wooden frame including all necessary materials	76.76	m <sup>2</sup>			-
814.3	Provision for toilet (a pan with flushing system, wash basin, pipes and fittings for above, 1000lt WaterTank, 6" dia HDP pipe, and septic tank of size 2*1.5*1.5m with stone masonry and RCC cover including excavation, backfilling etc) all complete	1.0	LS			
<b>TOTAL OF Item 8 Operator Room</b>						
<b>Total of Bill No. 8</b>						

**BILL OF QUANTITIES**

Ref. Dwg No. :

**Bill NO. 09 : TAILRACE CANAL**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
<b>901</b>	<b><u>SITE CLEARANCE</u></b>					
901.1	Preparation of construction area by clearing, grubbing and stripping. Tree trunks, bushes and shrubs to be loaded, transported, dumped and stockpiled	117.00	m <sup>2</sup>			
<b>902</b>	<b><u>EARTHWORK IN EXCAVATION</u></b>					
902.1	E/W in excavation in Gravel Boulder Mix Soil (GBMS) with 1.5 m lift & 10 m lead as per instruction	131.00	m <sup>3</sup>			
902.2	Breaking boulder with breaker for boulder size more than 1.5m diameter.	10.00	m <sup>3</sup>			
<b>903</b>	<b><u>COMPACTED BACKFILLING</u></b>					
903.1	Backfilling with ordinary soils in 15 cm thick layers and hand compaction with sprinkling water	56.40	m <sup>3</sup>			
<b>904</b>	<b><u>CONCRETING WORK</u></b>					
904.1	Providing and Laying Machine Mixed Concrete M10 Concrete blinding (Nominal mix 1:3:6 ) in level surface with 30m haulage distance.	7.60	m <sup>3</sup>			

**Bill NO. 09 : TAILRACE CANAL**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
904.2	Providing and Laying Machine Mixed M20 Concrete (Design mix 1:1.5:3 ) for RCC wall and base of tailrace including compaction,curing,testing and lead 30 m etc. all complete as per the specifications	28.25	m <sup>3</sup>			
<b>905</b>	<b><u>REINFORCEMENT</u></b>					
905.1	Providing and laying reinforcement including cutting, bending, binding, fixing in position and all complete works as per the Drawings, Specifications and instruction of the Engineer	1,600.00	Kg.			
<b>906</b>	<b><u>FORMWORK</u></b>					
906.1	Providing, preparing and installing formwork including necessary supports and removing after completion and all complete works as per the Specifications, drawing and instruction of the Engineer	186.30	m <sup>2</sup>			
<b>907</b>	<b><u>STONE WORK</u></b>					
907.1	Preparation of sub grade formation and Dry stone soling of 250mm thick stone with leveled surface as per design and drawings.	25.00	m <sup>3</sup>			

**Bill NO. 09 : TAILRACE CANAL**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
907.2	Providing and Laying of Dressed / Rubble stone masonry with 1:6 cement sand mortar mortar with haulage distance upto 10m	100.89	m <sup>3</sup>			
<b>908</b>	<b><u>PLASTERING WORKS</u></b>					
908.1	Providing and applying 20 mm thick cement plaster including mortar mixing, scaffolding, curing etc complete as per specification lead 30 m (manual mixing), Cement sand: 1:4	154.53	m <sup>2</sup>			
<b>909</b>	<b><u>Screeding and Puning</u></b>					
909.1	50mm thick Screeding in 1:2:4 cement sand ratio with 3mm thick punning in 1:1 ratio	69.70	m <sup>2</sup>			
<b>910</b>	<b><u>GABION WORKS</u></b>					
910.1	Gabion Works- Making gabion including supply of materials, placing and filling with stones all complete					
	Box size (2 m x 1 m x0 .5 m, 2 m x 1 m x 1 m )	16.00	m <sup>3</sup>			
<b>TOTAL OF Item 9 Tailrace</b>						
<b>Total of Bill No. 9</b>						



**BILL OF QUANTITIES**

Ref. Dwg No. :

**Bill NO. 10 : SWITCHYARD CIVIL WORKS**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
1001	<b>All Civil Works related to the Switchyard at powerhouse</b>					
	Excavation to achieve level surface and level required for foundation for equipment, Concrete Footing for structure of Lattice Metal tower for CT, PT and VCB, Appropriate Concrete footing for Step up Power Transformer, Stone Aggregate in all Switchyard Area, Appropriate Fencing (chain linked wirebase with Metal Angle post) etc with other required civil structure in Switchyard.	1.00	LS			
<b>TOTAL OF Item 10 Switchyard Civil Works</b>						
<b>Total of Bill No. 10</b>						

**BILL OF QUANTITIES**

Bill NO. 11 : HYDROMECHANICAL

Ref. Dwg No. :

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
<b>1100</b>	<b>Design, Supply, Installation, Surpervision, Testing and Commissioning of the Hydromechanical complete set of Equipments as per technical specification. The period of validity of the Warranty shall be: 1095 Days</b>					
<b>1103</b>	<b>MS Penstock Pipe with 600 mm internal Dia. and other Mechanical works</b>					
1103.1	MS Penstock pipe Pipe 5 mm thick with 600mm internal dia.including bends	23,463	kg			
1103.2	MS Penstock pipe Pipe 6 mm thick with 600mm internal dia.including bends	7,443	kg			
1103.3	MS Penstock pipe Pipe 8 mm thick with 600mm internal dia.including bends	13,855	kg			
1103.4	MS Penstock pipe Pipe 10 mm thick with 600mm internal dia.including bends	11,810	kg			
1103.5	MS Branch Penstock Pipe 10 mm thick with 450 mm internal dia. including bifurcation	3,268	kg			
1103.6	Trifurcation Joint	1	Nos.			
1103.7	Gravel Flushing pipe at gravel trap of dia 500mm with 4mm thick	299	kg			
1103.8	HDPE Pipe of 300mm dia for spillway at settling Basin	24	m			
1103.9	MS Air Vent pipe , 620 mm dia. at end of Forbay	1	LS			
1103.10	C-Clamp with HDP Wear plate	86	Nos.			

**Bill NO. 11 : HYDROMECHANICAL**

Ref. Dwg No. :

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
1103.11	Expansion joints: 600 mm internal dia.	13	Nos.			
1103.12	Pressure Gauge	3	Set			
1103.13	375mm HDPE pipe for diversion of Tailrace water to Suligad River	50	m			
<b>1104</b>	<b>Gates &amp; Accessories</b>					
1104.1	Intake Gate, Vertical wheel type Manually Operated System (1.2 m x 0.75m) (WXH) 1 set with its guide frames, hoist and their accessories with all mechanical equipment'	1,125	Kg			
1104.2	Coarse Trash rack (for 2.0 m x 1.2 m Complete 1 set with 16 Dia bars @ 100 c/c spcing including its frame and their accessories	810	Kg			
1104.3	Under Sluice Gate, Vertical wheel type Manual Operated (1.2m x 1.0m) (WXH) complete 1 set of Gate with its guide frames, hoist and their accessories with all mechanical equipment.	950	Kg			
1104.4	Stop log infront of Undersluice (1.2 x 1.0) (WxH) complete 1 set with its guide frames, hoist and their accessories complete set	950	Kg			
1104.5	Desender/Settling Basin Flushing Gate (0.5m x 0.5m) (WXH) complete 1 set of Gate with its guide frames, hoist and their accessories	550	Kg			

**Bill NO. 11 : HYDROMECHANICAL**

Ref. Dwg No. :

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
1104.6	Fine Trash rack (3 m x 1.8 m) (for Headpond outlet ) One Complete set with its frame and their accessories	810	Kg			
1104.7	Tailrace Stoplog(0.85m x 1.5m) (WxH) complete 3 set with its guide frames, hoist and their accessories	1,996	Kg			
1104.8	Gravel trap Flushing Sluice Valve of 500 Dia	1	Set			
<b>TOTAL OF Item 11 for this page</b>						
<b>Total of Bill No. 11</b>						

**BILL OF QUANTITIES****Bill NO. 12 : ELECTROMECHANICAL****Ref. Dwg No. :**

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
1201	<b>Design, Supply, Delivery and Installation of Electromechanical Components complete Set which should have performed 5 years successfully including Transportation upto the site with Specification mentioned below (A1 to A8). The period of validity of the Warranty shall be: 1095 Days</b>	1.00	Set			
<b>A1</b>	<b>Hydraulic Turbine and Accessories</b>					
<b>A1.1</b>	<b>Hydraulic Turbine - 3 sets</b>					
	Horizontal Pelton type tangential flow impulse turbines double jet with inlet valve, casing, guide vanes,, with associated auxiliary and ancillary equipments in complete set to develop rated output of 300 kW at rated net head and rated discharge, 1000 RPM(CR13NI4MO). <b>(ANDRITZ or VOITH or GEPPERT or FLOVEL or BHEL or EFG Turbien or</b>					
a)	Turbine Casing with Stay vans, foundation materials all complete with accessories					
b)	Transition pipe with all complete accessories					
c)	Spare Valve Gate with assembly with accessories					
d)	Side Cover, Labyrinth seal, shaft seals, etc. with accessories					
e)	Turbine Generator shaft coupling system all complete.					
f)	Fly wheel of inherent GD2 value should be atleast 1042 kg-m2 with complete with protection system					

**Bill NO. 12 : ELECTROMECHANICAL**

Ref. Dwg No. :

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
A1.2	<b>Inlet Valve: Main Inlet Valve:</b> with hydraulic operated and closing by counter weight, branch pipe to connect with penstock and turbine with necessary control & operation arrangements, fittings, mountings and other ancillary equipment's in complete set. Electric Motor Operated. - <b>3 Sets (ANDRITZ or VOITH or GEPPERT or FLOVEL or BHEL or EFG Turbien or CINK )</b>					
A1.3	<b>Governing System:</b> Digital Type having PID and PLC Function consisting of controller and hydraulic servo system complete as per specifications. - <b>3 Sets (ANDRITZ, VOITH,GEPPERT, FLOVEL,BHEL, EFG Turbien, or CINK )</b>					
A1.4	<b>Cooling Water System Drainage and Dewatering System, Lubricating and Pressure Oil System, Compressed Air System etc. Complete (Air, Oil &amp; Water System).- 3 Sets</b>					
A2	<b>Synchronous Generator - 3 Lot</b>					
A2.1	Synchronous generator with rating of minimum 350 kVA , 0.4kV, 3 phase, 0.8 pf, 50 Hz $\pm$ 2.5%, class 'F' insulation, 6 Pole, 1000 RPM, brussless excitation, terminal equipment like neutral grounding Trasnformer and accessories CT's, PTs, LA/SC and other auxiliary system with contineous duty and 10% contineously overload capacity with all complete set. <b>(ANDRITZ or VOITH or GEPPERT or FLOVEL or BHEL or EFG Turbien or CINK)</b>					
A3	<b>Auxillary equipment- 1 Lot</b>					

**Bill NO. 12 : ELECTROMECHANICAL**

Ref. Dwg No. :

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
A3.1	Electrically Operated Travelling(EOT) crane 5 t system complete with accessories					
A3.2	Fire fighting System all complete 5 sets 7Kgs CO2 fire extinguisher					
A3.3	Illumunation and Ventilating System					
A4	<b>Control Panel - 3 Lot</b>					
A4.1	Turbine Generator Control Panel					
	The turbine generator control panel consists of Turbine Control, generator control, excitation control, synchronization unit, auxiliaries load control with all the metering. The breakdown details are mentioned below. <b>(ABB,Siemens,CG,SCHNEIDER,GE,Fuji or equivalent)</b>					
a)	Turbine Control,Protection,Metering, Instrumentation and Annunciation Panel (relays shall be as per single line diagram)					
b)	Excitation control having Automatic Voltage Regulator (AVR) with sensing of rms voltage and Automatic Power Factor Regulator (APFR) Panel all complete with all accessories(Generator Excitation System)					
c)	Generator Control panel, 630A ACB breaker panel with control,metering (kW, kWh, PF, Frequency meter, ammeter & voltmeter with selector switch etc.), protection system having minimum protection functions of under/over voltatge, under/over frequency, over current, over load, rate of change of frequency/voltage vector shift, phase unbalance protection, reverse power protection all complete					

**Bill NO. 12 : ELECTROMECHANICAL**

Ref. Dwg No. :

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
d)	Generator Protection Unit (GPU) having minimum protection functions of under/over voltatge, under/over frequency, over current, over load, rate of change of frequency/voltage vector shift, phase unbalance protection, reverse power protection					
e)	Automatic synchronizing panel complete with accessories compatible for the generating units - 1 lot					
4.2	LT AC(0.4kV, 1600A ACB) Panel and DC Distribution Cubicles. The switchgears must be from <b>ABB,Siemens,CG,SCHNEIDER,GE,Fuji or equivalent.- 1 Lot</b>					
4.3	11kV Line Breaker Panel(Transformer Breaker) complete with over current relay, earth fault relay, master trip relay, metering devices indoor type.The switchgears must be from <b>ABB,Siemens,CG,SCHNEIDER,GE,Fuji or equivalent. : 1 Lot</b>					
4.4	HMI System for on-site operation and SCADA system for remote operation for complete monitoring and control of power plant- 1 Lot					
A5	<b>Outdoor Switchyard Equipment</b>					
A5.1	Transformer: minimum of 1000 kVA, 50 Hz, 3 Phase, 0.4/11 kV of YNd11 Setup Power Transformer with Buchholz relay, sudden gas pressure release valve, temperature rise relay, differential relay with complete accessories including neutral CT. -1 Lot					
A5.2	12 kV, 630 A, 25 kA Vacuum Circuit Breaker cubicle complete with all accessories. 1 Set					



**Bill NO. 12 : ELECTROMECHANICAL**

Ref. Dwg No. :

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
A5.3	11 kV, 630 A Disconnecting Switches without earth switch complete with all accessories. 1 Set					
A5.4	9 kV, 10 kA, Lightning arrester outdoor station type with surge monitor. 1 Set					
A5.5	11 kV, Current transformer(Single Phase, Dual Core) complete set 100-100/5-5 A, 5P20, 20 VA, 0.5s. 1 Set					
A5.6	11kV, Potential transformer (3 Phase, Single Core) complete set with power fuse protection 11000/sqrt(3)/110/sqrt(3),0.5,200VA. 1 Set					
A5.7	Galvanized steel structure for , busbar gantry and equipment (e.g. CB, CT, PI, LA, isolators) for 11kV System supporting frame complete with bolts, nuts and all accessories. -1 Lot					
A5.8	Busbars, conductors and different connectors to complete the specified scope of works. -1 Lot					
A5.9	Necessary jointing kits -1 Lot					
A5.1	Earthing System to connect Switchyard Equipment to existing earth to achieve less than 1 Ohm with all complete.-1 Lot					
A6	<b>DC and UPS System</b>					
A6.1	Three phase, full wave, 110V DC,10kVA Float Cum Boost Charger suitable for 110V Battery system of minimum of 11kWhr battery bank. Additional UPS of minimum 1kVA suitable for 110V DC input and 230V AC input. -1 Lot					
A7	<b>Cables</b>					

**Bill NO. 12 : ELECTROMECHANICAL**

Ref. Dwg No. :

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
A7.1	LT cable:1.1 kV, 3.5 core, 400mm <sup>2</sup> Copper XLPE armoured power & Control Cables for Powerhouse & Switchyard and all termination and jointing kit to complete the scope of work (The rating of the cable is done as per the current rating of the connecting equipments)- 3 Lot LT cable:1.1 kV, single core, 2 run of 240mm <sup>2</sup> pr phase Aluminium XLPE armoured power & Control Cables for Powerhouse & Switchyard and all termination and jointing kit to complete the scope of work (The rating of the cable is done as per the current rating of the connecting equipments)- 1 Lot HT cable:12 kV, 3 core, 35mm <sup>2</sup> Aluminium XLPE armoured power & Control Cables for Powerhouse & Switchyard and all termination and jointing kit to complete the scope of work (The rating of the cable is done as per the current rating of the connecting equipments).-1 Lot					
A8	<b>Spare parts minimum of AVR/APFR, Resistance Temp. Detector for Generator, Bearing Pad for Generator, PLC/PID controller for Governor, GPU and SCADA software as per Technical Specification (D6). 1 Set</b>					
<b>1202</b>	<b>LV Control Panel at NEA existing plant</b>					
	Synchronizing Panel for 200kW isolated plant consisting of following;					
1202.1	MCCB of 500A	2	nos.			
1202.2	ACB of 630A, 400V	1	nos.			

**Bill NO. 12 : ELECTROMECHANICAL**

Ref. Dwg No. :

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
1202.3	Excitation control having Automatic Voltage Regulator (AVR) and Automatic Power Factor Regulator (APFR) Panel all complete with all accessories(Generator Excitation System)	1	nos.			
1202.4	Numerical relay having protection fuctions of atleast; o/c, earth fault relay, voltage constraint o/co/u voltage, o/u frequency, reverse power flow, ROCOF/VVS, phase unbalancing, negative sequence, etc	1	set			
1202.5	1.5kVA UPS cum Battery charger with 24-V Battery System, Input 230 V, Output 230V Sine Wave having battery bank of minimum of 2.4kWhr	1	set			
1202.6	kW, kWh, PF, Frequency meter, ammeter & voltmeter with selector switch	1	set			
1202.7	Synchronizer (synchronoscope, Dual frequency and voltmeter, dark lamp set, defferential etc.) with Auto & Manual Selector Switch)	1	set			
1202.8	3.5 core XLPE copper cable of 120mm <sup>2</sup> for phase conductors and 70mm <sup>2</sup> for neutral (2 run for rated current)	50	meter			
<b>1203</b>	<b>Tools for Assmebly and Maintenance as Technical Specification (D7)</b>	1	PS	200,000	Two Hundred Thousand Rupees and No Paisa	<b>200,000</b>
1204	Transportation Cost using Helicopter from Surkhet/Chaurjhari to Aankhe Khola Site, Shyanta, Thulibheri, Dolpa for all above mention equipment	1	LS			
<b>TOTAL OF Item 12 for this page</b>						
<b>Total of Bill No. 12</b>						

# BILL OF QUANTITIES

Bill NO. 13: TRANSMISSION LINE WORKS

Ref. Dwg No. :

Item No.	Item Description		Qty	Unit	Rate NRS.		Amount NRS
					In figures	In words	
<b>A SCHEDULE-A: PRICE SCHEDULE FOR GOODS TO BE OFFERED FROM WITHIN THE PURCHASERS COUNTRY</b>							
<b>1301</b>	<b>Supply and Delivery upto project site area of Fully Galvanized Steel Pole Structure type(with crossarm channel, bracing, clamps, nutbolts, insulators and hardware, wire fittings and necessary accessories all complete) as per NEA Standards, Drawings and Technical Specification</b>						
<b>11kV HT Transmission Line Details</b>							
1301.1	HT11_P1	11 m. Steel Tubular Pole with fittings and accessories complete as per drawing and technical specifications (SA structure)	111	Set			
1301.2	HT11_P2	11 m. Steel Tubular single pole with fittings and accessories complete as per drawing and technical specifications (DDE Type structure)	10	Set			
1301.3	HT11_P3	11 m. Steel Tubular Pole (H structure) with fitting and accessories complete as per drawing and technical specifications	29	Set			
1301.4	HT11_P4	11 m. Steel Tubular Pole( Four Pole Structure)with fitting and accessories as per drawing and technical specification	2	Set			
<b>1302</b>	<b>Supply and deliver of ASCR conductor complete set with accessories for overhead line as per NEA Standards</b>						
1302.1	HT11_C	50 sq. mm. ASCR Conductor "Rabbit" with Binding Wire , PG Clamp and other required all accessories as per drawing and technical specifications. (1-line length 9.55 km, Total Conductor 31.50)	31.50	km			
<b>1303</b>	<b>Supply and Delivery of Stay Set Complete with Accessories as per</b>						
1303.1	HT11_S	Stay set with all required accessories complete as per drawing and technical specifications for HT Steel Tubular Pole	77	Set			

**Bill NO. 13: TRANSMISSION LINE WORKS**

Ref. Dwg No. :

Item No.	Item Description		Qty	Unit	Rate NRS.		Amount NRS
					In figures	In words	
<b>1304</b>	<b>Supply and Delivery of DO Fuse with all necessary hardware all complete as per NEA Standards</b>						
1304.1	DO	Drop out Fuse with all complete accessories as per drawing and Technical Specifications for mounting at Steel Tubular pole	5	Set			
<b>1305</b>	<b>Supply and Delivery of Lighting Arrestor with earthing plate, wire, nut bolts all necessary hardware and all complete as per NEA Standards</b>						
1305.1	LA-HT	Lighting Arestor with all complete accessories as per drawing and Technical Specifications (9kV, 3 Phase, LA for 11kV HT Lines).	11	Set			
<b>1306</b>	<b>Supply and Delivery of Earthing Set with accessories as per NEA Standards</b>						
1306.1	ER-HT	Copper Rod Earhing : minimum dia. 20 mm of length 2 M with 8 SWG Copper wire , Chemical Earthing Compound of 25 Kg each, 16 mm polythene pipe for copper wire etc. with all complete set of accessories as per drawing and technical specification - for 11 kV Lines	11	Set			
<b>1307</b>	<b>Supply of metering System at Suligad (Connecting point with NEA)</b>						
1307.1	MS	Four Pole Structure for installation of CT/PT, Disconnecting	1	Set			
1307.2		11 kV, 630 A, 25kA Disconnecting Switches with earth switch complete with all accessories	2	Set			
1307.3		Pole mounting type 11 kV, Current transformer(Single Phase, Dual Core) complete set 75-75/5-5 A, 20 VA, 0.5s	3	Set			
1307.4		11kV, Potential transformer (3 Phase, Single Core) complete set with power fuse protection 11000/ sqrt(3)/110/sqrt(3),0.5,200VA	1	Set			
1307.5		Earthing System to connect Switchyard Equipment to existing earth to achieve less than 1 Ohm with all complete.	1	Set			

**Bill NO. 13: TRANSMISSION LINE WORKS**

Ref. Dwg No. :

Item No.	Item Description		Qty	Unit	Rate NRS.		Amount NRS
					In figures	In words	
<b>1308 Supply and Delivery of Tools and Equipment complete set</b>							
1308.1	TE	Portable Aluminium Folding Step ladder Telescopic 25 feet long	2	nos			
1308.2		Megger (5000 volt, Digital type )	1	nos			
1308.3		Safety belt suitable for electrical line construction work	4	nos			
1308.4		2 ton capacity vice with tong	2	nos			
1308.5		Working safety set like Helmet, Jacket and Globe for each worker	15	nos			
1308.6		Tung Tester ( 600 volt, 0-200 amp min.)	2	nos			
1308.7		Insulation Globe- 12 KV	2	nos			
1308.8		Tools and Equipment Box including combination plier 2 no. protable hammer 2 no. screw driver 2 no. 4 in 6 in 10 in 1/1 no wire cutter 2 no. line tester 2 no. Adjustabel rench 2 set.	2	nos			
1308.9		11 kV FRP Telescopic Operating Rod of 20 feet long	2	nos			
<b>1309 Supply and Delivery of Spare Material</b>							
1309.1	SM	11 m steel tubular pole	10	nos			
1309.2		50 Sq. mm Rabbit ACSR Conductor	1	km			
1309.3		11 kV Silicone Polymer Pin Insulator with all fitting.	40	Sets			
1309.4		11 kV Silicone Polymer Disc Insulator will all fitting	20	Sets			
1309.5		11 kV Silicone Polymer Lighting Arrester	1	Sets			
<b>B</b>	<b>SCHEDULE-B: PRICE SCHEDULE FOR SERVICE TO BE OFFERED</b>						
<b>1310</b>	<b>Erection and installation of Fully Galvanized Steel Pole Structure</b>						
	<b>11kV HT Transmission Line Details</b>						
1310.1	HT11_P1	11 m. Steel Tubular Pole with fittings and accessories complete as per drawing and technical specifications (SA structure)	111	Set			
1310.2	HT11_P2	11 m. Steel Tubular single pole with fittings and accessories complete as per drawing and technical specifications (DDE Type structure)	10	Set			
1310.3	HT11_P3	11 m. Steel Tubular Pole (H structure) with fitting and accessories complete as per drawing and technical specifications	29	Set			

**Bill NO. 13: TRANSMISSION LINE WORKS**

Ref. Dwg No. :

Item No.	Item Description		Qty	Unit	Rate NRS.		Amount NRS
					In figures	In words	
1310.4	HT11_P4	11 m. Steel Tubular Pole( Four Pole Structure)with fitting and accessories as per drawing and technical specification	2	Set			
<b>1311 Stringing oof ASCR conductor complete set with accessories as</b>							
1311.1	HT11_C	50 sq. mm. ACSR Conductor "Rabbit" with Binding Wire , PG Clamp and other required all accessories as per drawing and technical specifications. (1-line length 9.55 km, Total Conductor 31.50)	31.50	km			
<b>1312 Ereccion and Installation of Stay Set Complete with Accessories</b>							
1312.1	HT11_S	Stay set with all required accessories complete as per drawing and technical specifications for HT Steel Tubular Pole	77	Set			
<b>1313 Installation of DO fuse complete with accessories and hardwares</b>							
1313.1	DO	Drop out Fuse with all complete accessories as per drawing and Technical Specifications for mounting at Steel Tubular pole	5	Set			
<b>1314 Installation of Lighting Arestor with all complete accessories as</b>							
1314.1	LA-HT	Lighting Arestor with all complete accessories (including Earthing) as per drawing and Technical Specifications (9kV, 3 Phase, LA for 11kV HT Lines).	11	Set			
<b>1315 Ereccion and Installation of metering System at Suligad</b>							
1315.1	MS	Erection and Installation of Metering System at Suligad as per drawing and technical specification (installation of 4 pole, PT, CT, Gang-operating Switch etc.)	1	LS			
<b>TOTAL OF Item 13 for this page</b>							
<b>Total of Bill No. 13</b>							

**BILL OF QUANTITIES****Bill NO.14 : ENVIRONMENTAL MITIGATION AND MOINITORING WORKS**

Item	Description	Qty	Unit	Rate NRS.		Amount
				In figures	In words	NRS
<b>1401</b>	<b>Environmental Mitigation and Monitoring Works</b>					
1401.1	Plantation cost of 250 saplings including site preparation, pitting, composting	1	LS			
1401.2	Care taker for the plantation Area	36	Man Month			
1401.3	Forest and Wildlife Conservation Program	1	PS	300,000.00	Three Hundred Thousand Rupees and No Paisa	300,000.00
1401.4	Restriction on Poaching Program	1	PS	200,000.00	Two Hundred Thousand Rupees and No Paisa	200,000.00
1401.5	Placement of Warning Sign Post	1	PS	50,000.00	Fifty Thousand Rupees and No Paisa	50,000.00
<b>TOTAL OF Item 14 for this page</b>						
<b>Total of Bill No. 14</b>						



**BILL OF QUANTITIES****Bill NO. 15 : SCHEDULE OF DAY WORKS**

Item	Description	Unit	Quantity	Rate NRS.		Amount NRS.
				In figures	In words	
<b>1501</b>	<b>LABOR</b>					
1501.1	Skilled Labour	Person/days	1			
1501.2	Semi Skilled Labour	Person/days	1			
1501.3	Unskilled Labour	Person/days	1			
1501.4	Security Gaurd	Person/days	1			
1501.5	Helper Mechanics	Person/days	1			
1501.6	Light Vehicle Driver	Person/days	1			
1501.7	Runner	Person/days	1			
1501.8	Survey Helper	Person/days	1			
1501.9	Welder	Person/days	1			
1502.10	Supervisor	Person/days	1			
1502.11	Foreman	Person/days	1			
1502.12	Heavy Vehicle Driver	Person/days	1			
<b>1502</b>	<b>MATERIALS</b>					
1502.1	Cement Ordinary Portland or equivalent in 50 kg bag	bags	1			
1502.2	Hollow Block (16"X8"X4")cm	Nos.	1			
1502.3	Block Stone	cum.	1			
1502.4	Crushed mixed Aggregates	cum.	1			
1502.5	Different Sizes of River Bed Screening river Pebbles	cum.	1			
1502.6	River Bed Sand	cum.	1			
1502.7	Different Sizes TMT Bar					
	a) 8 mm dia	kg	1			
	b) 10,12,16,20, 25mm dia	kg	1			

**Bill NO. 15 : SCHEDULE OF DAY WORKS**

Item	Description	Unit	Quantity	Rate NRS.		Amount NRS.
				In figures	In words	
	c) 28,32 mm dia	kg	1			
1502.8	Different Sizes TOR Steel					
	a) 8mm dia TOR steel	kg	1			
	b) 10-25mm TOR steel	kg	1			
	c) 28-32mm TOR steel	kg	1			
1502.9	Different Sizes TOR Steel					
	a) 4.75, 7 mm dia	kg	1			
1502.10	Binding Wire	kg	1			
1502.11	Different type of wood					
	Sal wood	cum	1			
	Local soft Wood	cum.	1			
1502.12	CGI Sheets 24 swg	sqm.	1			
1502.13	Barbed Wire					
	12 guage commercial,Medium duty	kg	1			
<b>1503</b>	<b>EQUIPMENTS (Including Driver/Operator, Feul)</b>					
1503.5	Generator* (Upto 10 KVA)	Hr.	1			
1503.6	Generator* (10+ to 30 KVA)	Hr.	1			
1503.7	Water Pump (Upto 4" DIA)	Hr.	1			
1504.11	Tractor (Upto 85 HP)	Hr.	1			
<b>TOTAL OF Item 15 for this page</b>						
<b>Total of Bill No. 15</b>						

**BILL OF QUANTITIES****Bill NO.16 : OPERATION AND MAINTANANCE**

Item	Description	Qty	Unit	Rate NRS.		Amount NRS
				In figures	In words	
<b>1601</b>	<b>Remuneation</b>					
1601.1	Manager	12	Month			
1601.2	Operator (3 nos.)	36	Month			
1601.3	Office Assistant (1 no.)	12	Month			
1601.4	Peon (1 no.)	12	Month			
<b>1602</b>	<b>Miscellaneous (For 12 months operation)</b>	1	Lump Sum			
<b>Sub total for this page</b>						
<b>Total of Bill No. 16</b>						

## **Section 5 - Eligible Countries**

No nationality restrictions apply, other than any restrictions arising from ITB 4.7