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WANGCHHU HYDROELECTRIC POWER LIMITED

(a JV of Druk Green Power Corporation Limited and Adani Power Limited)

INTERNATIONAL COMPETITIVE BIDDING

BIDDING DOCUMENTS

FOR

**STAGE 1 QUALIFICATION AND TECHNICAL
PROPOSALS**

CONTRACT PACKAGE: WC II – HRT

**CONSTRUCTION OF HRT FROM CHAINAGE 588 TO
CHAINAGE 11+225 AND ITS ASSOCIATED ADITS
INCLUDING HYDRO-MECHANICAL GATES**

RFB NO: WHPL/022/2026

DATE: 24 August 2026

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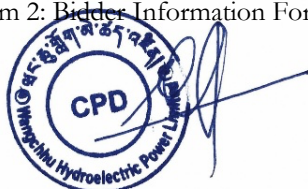
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Contract Package: WC II - HRT
Stage 1 Qualification and Technical Proposals
Section 1 – Invitation for Qualification and Technical Proposals

RFB No: WHPL/022/2026

24 August 2026

SECTION 1 - INVITATION FOR QUALIFICATION AND TECHNICAL PROPOSALS

1. Stage-1 Qualification and Technical Proposals are hereby invited by Wangchhu Hydroelectric Power Limited (hereafter referred to as the “Employer”) from experienced, reputed, competent, and financially sound Contractors/Companies/Firms meeting the eligibility, qualification, and technical requirements specified in the Bidding Documents, for the execution of the Works described below for the 570 MW Wangchhu Hydroelectric Power Project, located under Chhukha Dzongkhag, Bhutan.

Contract Package	Description of Work	Bid Security (Nu/Rs Million)	Duration (Months)
WC II - HRT	Construction of HRT from Chainage 588 to Chainage 11+225 and its Associated Adits including Hydro-Mechanical Gates	78	48
<i>* The completion period is reckoned from the date of Letter of Acceptance issued to the successful Bidders. The completion period also includes mobilization time.</i>			

2. The eligible Bidder shall have sufficient experience in successfully carrying out works of similar nature and magnitude and must submit documentary evidence in support of the eligibility and qualification criteria as required under the Stage 1 Bidding Document.
3. Bidders may download the Stage 1 Qualification and Technical Proposals Bidding Document for the Contract Package WC I from www.drukgreen.bt, and www.whpl.bt free of cost, from 24 August 2026 to 24 September 2026.
4. A Bidder wishing to participate in three Contract Packages shall satisfy the eligibility, qualification, and technical requirements specified under Section 4 – Qualification and Technical Evaluation Requirements and Criteria of the respective Stage-I Bidding Document separately for each Contract Package.
5. The Bidders may note the following key dates pertaining to the bidding process:
- End date for receipt of queries: **10 September 2026**
 - Last date of submission of Bids: **24 September 2026** until **14.30 Hrs (BST)**
 - Opening of Bids: **24 September 2026** at **15.30 Hrs (BST)**.
6. The Employer reserves the right to accept or reject any Bid, annul the bidding process, or reject all Bids, in accordance with the provisions of the Bidding Documents.

General Manager (CPD)
Wangchhu Hydroelectric Power Limited
Phuentsholing, Bhutan



SECTION 2 - INSTRUCTIONS TO BIDDERS (ITB)

A. GENERAL

1 Scope of Bid

- 1.1. The Wangchhu Hydroelectric Power Limited (WHPL), having its registered office at Phuentsholing, Bhutan, hereinafter referred to as “the Employer,” invites Stage 1 [Qualification and Technical Proposals] from eligible and qualified Bidders for the construction of the Works described in this Bidding Document.
- 1.2. The Stage 1 Bidding Process shall comprise the submission and evaluation of the Bidder’s Qualification and Technical Proposal only. No Financial/Price Proposal shall be submitted at Stage-I. Bidders shall demonstrate their eligibility, qualification, experience, technical capability, and capacity to execute the Works in accordance with the requirements specified in this Stage 1 Bidding Document.
- 1.3. Only Bidders who successfully meet the specified qualification and technical requirements at Stage-I shall be considered eligible to participate in Stage 2 [Financial Proposal] bidding process, for which a separate Bidding Document shall be issued to qualified Bidders.
- 1.4. Throughout these Bidding Documents, the terms “bid” and “tender”, and their derivatives, including “bidder/tenderer,” “bid/tender,” “bidding/tendering,” etc., are synonymous, unless the context otherwise requires. The term “day” means a calendar day. Words in the singular also include the plural and vice versa, unless the context otherwise requires

2 Source of Funds

- 2.1 The Project financing is structured as 70:30 debt equity ratio and being implemented under strategic partnership between Druk Green Power Corporation Limited (DGPC), holding a 51% equity stake, and Adani Power Limited (APL), holding a 49% equity stake. The debt financing is being arranged from financial institutes in India.

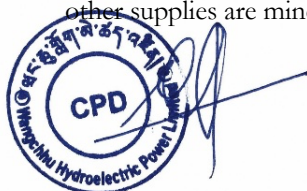
3 Eligible Bidders

- 3.1 This invitation for Stage 1 – Qualification and Technical Proposals is open to all experienced, reputed, competent, and financially sound Contractors/Companies/Firms that meet the Qualification and Technical Requirements Criteria specified under Section 4 of the Stage 1 Bidding Documents. A Bidder may be a private entity, a state-owned enterprise or institution, subject to applicable laws and regulations, or any combination of such entities in the form of a Joint Venture (JV) under an existing agreement or with the intent to enter into such an agreement, supported by a Letter of Intent.
- 3.2 Bidders should not have been banned/de-listed/ black listed/ debarred from business by the Employer or any Government institution or public sector enterprise or any government, Central or State or any statutory authority during the last 5 (five) years on grounds of corrupt/fraudulent practices.
- 3.3 The Integrity Pact, to be signed by all prospective Bidders and the Employer, shall commit the authorized representatives and officials of both parties to refrain from and prevent any corrupt, fraudulent, collusive, or coercive practices during the bidding process and throughout the implementation of the Contract. Only those Bidders who have entered into the Integrity Pact with the Employer shall be eligible to participate in the bidding process. Duly signing and submitting the Integrity Pact, in the prescribed format included under Section 7 of the Stage 1 Bidding Documents, shall be a mandatory qualifying requirement.

The Integrity Pact included in the Bidding Documents, duly signed by the authorized representative of the Employer at the time of issuance of the Bidding Documents, shall be signed by the Bidder through its duly authorized representative and submitted along with the Stage 1 – Qualification and Technical Proposal. The authorized signatories shall be the duly authorized representative of the Bidder and the authorized representative of the Employer.

4 Eligible Materials, Plant, Supplies, Equipment and Services

- 4.1 The materials, Plant or Contractor’s Equipment, other supplies, and services to be provided under the contract, shall have their origin in eligible source countries and all expenditures made under the contract will be limited to such materials, Plant or Contractor’s Equipment, other supplies, and services.
- 4.2 For purposes of Sub-clause 4.1 above, origin means the place where the materials, plant, equipment, and other supplies are mined, grown, produced, or manufactured, and from which the services are supplied.



5 Qualification of the Bidder

5.1 Bidders shall, as part of their bid:

- a) Submit a written power of attorney (POA) authorizing the signatory of the bid to commit the bidder;
 - i) In case of a General Power of Attorney, a true copy of the POA shall be duly notarized by Notary Public along with a declaration from the Company Secretary /Corporate Secretary endorsing the validity of the Power of Attorney.
 - ii) In case of a specific Power of Attorney (as per format included in forms & procedures), the original POA along with a copy of the resolution of the Board of Directors for the specific appointment. In case of delegation by a General POA holder, the documents as sought under i) above shall be submitted along with the original specific POA.
- b) Submit/include in their bids the following information/documents:
 - i) evidence of access to lines of credit and availability of other financial resources;
 - ii) work commitments;
 - iii) availability of key personnel; and
 - iv) availability of major Contractor's Equipment
- c) Each Bidder shall duly fill in the prescribed Data sheets/qualification particulars along-with relevant experience certificates, annual reports and other information evidencing that the qualification criteria stipulated herein have been met.
- d) Submit an offer which is clear, comprehensive, unambiguous and complete in all respects, including all necessary qualification, technical and contractual information required under the Stage 1 Bidding Documents.
- e) Submit a Declaration, as per Proforma given under Section-4 confirming that the bid submitted by the bidder is strictly in conformity with the documents issued by the Employer.

5.2 The minimum qualification requirements for the eligible Bidders shall be as specified under Section 4 [Qualification and Technical Evaluation Requirements and Criteria].

6 Nature of Bidders

- 6.1 A firm shall submit only one Bid for the Contract, either as a Single Entity or as a member of Joint Venture. A firm that submits, or participates in, more than one Bid for the Contract may result in the rejection of all Bids in which that firm has participated, unless such participation is expressly permitted under the Bidding Documents.
- 6.2 In the case of a JV, all members shall be jointly and severally liable for the execution of the entire Contract, if awarded. The JV shall nominate a Representative/Lead Member who shall have the authority to conduct all business for and on behalf of any and all members of the JV during the Bidding Process and, in the event the JV is awarded the Contract, during execution of the Contract. The maximum number of members permitted in a JV shall be as specified in the Bid Data Sheet (BDS).

7 Cost of Bidding

- 7.1 The bidder shall bear all costs associated with the preparation and submission of its bid, and the Employer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

8 Site Visit

- 8.1 The bidders in their own interest, should inspect and examine the site and its surroundings and satisfy themselves, before submitting their bid, in respect of the site conditions including but not restricted to the following which may influence or affect the Works or cost thereof under the Contract:
 - a) Site conditions include access to the Site, existing and required roads and other means of transport/ communication for use by them in connection with the Works;
 - b) Requirement and availability of land and other facilities, for their enabling works, colonies, stores and workshops etc.;
 - c) Ground conditions including those bearing upon transportation, disposal, handling and storage of materials required for the work or obtained there from;
 - d) Source and extent of availability of suitable materials including water, etc. and labour (skilled and un-skilled), required for Works and laws and regulations governing their use and employment;



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Section 2 – Instruction to Bidder (ITB)

- e) Geological, meteorological, topographical and other general features of the site and its surroundings as are pertaining to and needed for the performance of the Works;
 - f) The limit and extent of surface and sub-surface water to be encountered during the performance of the Works and the requirement of drainage and pumping;
 - g) The type of Contractor's Equipment and facilities needed, preliminary to, for and in the performance of the Works; and
 - h) All other information pertaining to and needed for the Works including information as to the risks, contingencies and other circumstances which may influence or affect the work or the cost thereof under this Contract.
 - i) Environmental & social aspects.
 - j) All applicable taxes, duties, royalty, cess, octroi etc.
 - k) Feasibility and adequacy of extracting material from the identified quarries.
- 8.2 The bidders should note that information about the site and local conditions in this Bidding Document is indicative only and has been given merely to assist the bidders and is not exhaustive.
- 8.3 The bidders should note that the Employer shall bear no responsibility for former's lack of acquaintance with the Site and other conditions or any information relating thereto. The consequences of the lack of any knowledge, as aforesaid, on the part of the bidders shall be at their risk and at cost and no charges or claims whatsoever consequent upon the lack of any information, knowledge or understanding shall be entertained or payable by the Employer.
- 8.4 The bidder and any of its personnel or agents will be granted permission by the Employer to enter upon 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.
- 8.5 The bidders should note that the costs of visiting the Site shall be at the bidder's own expenses.

B. BID DOCUMENTS

9 Content of Bid Documents

- 9.1 The Bid Documents are those stated below, and should be read in conjunction with any Addenda issued in accordance with Clause 11:

STAGE 1	QUALIFICATION AND TECHNICAL PROPOSAL
Volume - 1	Stage 1 Bidding Documents for Qualification and Technical Proposals
Section - 1	Invitation for Qualification and Technical Proposals
Section - 2	Instructions to Bidders (ITB)
Section - 3	Bid Data Sheet
Section - 4	Qualification and Technical Evaluation Requirements and Criteria
Section - 5	Employer's Requirements/ Project Information
Section- 6	Abstract of Conditions of Contract
Section - 7	Stage 1 Submission Forms
Section - 8	Appendices

10 Clarification of Bidding Documents

- 10.1 A prospective Bidder requiring any clarification on the Bidding Documents may notify the Employer in writing at the address indicated in the Bid Data Sheet. The Employer shall respond in writing to such requests for clarification received on or before the scheduled last date for receipt of queries. Any clarification that requires an amendment to the Bidding Documents shall be issued by the Employer as an Addendum in accordance with Clause 11 [Amendment to Bidding Documents].
- 10.2 The Employer shall not be obliged to respond to any request for clarification received after the period specified in the Bid Data Sheet. A request for clarification shall not, by itself, constitute grounds for extension of the deadline for submission of Bids.
- 10.3 The Employer's response to a request for clarification, including a description of the query but without identifying its source, shall be published through the same official means used for publication of the Invitation for Qualification and Technical Proposal.



- 10.4 Where a clarification requires an amendment to the Bidding Documents, such amendment shall be issued by Addendum in accordance with Clause 11 [Amendment to Bidding Documents].

11 Amendment to Bid Documents

- 11.1 At any time prior to the deadline for submission of Bids, the Employer may, for any reason, whether at its own initiative, or in response to a clarification requested by a prospective Bidder, amend the Bid Documents by issuing Addenda, which shall be announced through the public media to ensure that all prospective Bidders are duly informed.
- 11.2 Any Addendum thus issued shall form part of the Bidding Documents pursuant to Sub-Clause 9.1 and shall be published through the same means used for publication of the Invitation for Bids. The Addendum shall be binding on all Bidders, whether or not separately communicated to them.
- 11.3 To give prospective Bidders reasonable time in which to take an Addendum into account in preparing their Bids, the Employer shall extend as necessary the deadline for submission of Bids, in accordance with Clause 22 [Deadline for Submission of Bids].

C. PREPARATION OF BIDS

12 Language of Bid

- 12.1 The Bid, and all correspondence and documents related to the Bid exchanged by the bidder and the Employer shall be written in English. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied with a certificate of the authorized translator certifying therein an accurate translation of the relevant passages in the above stated language, in which case, for the purposes of interpretation of the Bid, the translation shall prevail.

13 Documents Comprising the Bid

- 13.1 The Bid submitted by the Bidder shall comprise the following documents:
- a) The Bidder shall submit the Letter of Stage 1 Proposal, duly completed and signed, together with all attachments identified in Sub-Clause 13.2 and the required forms provided in Section 7 of this Bidding Document.
 - b) Data related to Qualifying requirements under Section 4 of this bidding document.
- 13.2 Each Bidder shall submit with Letter of Stage 1 Proposal, the following attachments:
- a) A bid security furnished in accordance with Clause 18.
 - b) A power of attorney, as per Sub-clause 5.1 (a), indicating that the person(s) signing the Bid has the authority to sign the Bid and that the Bid is binding upon the Bidder during the full period of its validity in accordance with Clause 17.
 - c) A declaration in respect of the submitted bid conforming to the requirement of Sub-clause 5.1 (e).
 - d) Integrity Pact Duly signed between Employer and the Bidder in accordance with Sub-Clause- 3.3.

14 Letter of Stage 1 Proposal

- 14.1 The Bidder shall complete the Letter of Stage 1 Proposal in accordance with the format provided in Section 7 of this Bidding Document.

15 Bid Price

- 15.1 No price bid or financial proposal shall be submitted at Stage 1 of the bidding process. The separate Stage 2 Bidding Documents, including the requirements for submission of the Bid Price, shall be issued only to bidders who qualify under Stage 1.

16 Currencies of Bid and Payment

- 16.1 No currency shall be specified for the Bid or payment at Stage 1, as no price or financial proposal is required to be submitted at this stage. The currency in which the Bid shall be quoted and payments shall be made by the Employer shall be specified in the **Stage 2 Bidding Documents** issued to bidders who qualify under Stage 1.

17 Bid Validity

- 17.1 Bids shall remain valid for the period stipulated in the Bid Data from the date of opening of Stage 1 Qualification and Technical Proposal specified in Clause 25 [Bid Opening].



Section 2 – Instruction to Bidder (ITB)

- 17.2 In exceptional circumstances, prior to expiry of the original bid validity period, the Employer may request the bidders to extend the period of bid validity for a specified additional period. The request and the responses thereto shall be made in writing or by e-mail. A bidder may refuse the request without forfeiting its bid security. A bidder agreeing to the request will not be required or permitted to modify its bid, but will be required to extend the validity of its bid security for the period of the extension, and in compliance with Clause 18 [Bid Security] in all respects.

18 Bid Security

- 18.1 The bidder shall furnish, as part of its bid, a bid security for the amount and currency stipulated in the Bid Data.
- 18.2 The bid security shall be in the following manner:
- a) Cash Warrant/An irrevocable unconditional bank guarantee issued by a bank/financial institution in Bhutan or any nationalized/scheduled bank with endorsement/counter guarantee by a bank/financial institution in Bhutan.
 - b) Bank Guarantees for the Bid Security shall be valid for a period of not less than 120 (One Twenty) days from the date of opening of the Bid under Stage 1 Bidding Process. The Bid Security shall be made payable without any condition/demur 'on demand' to the Employer.
 - c) The format of the bank guarantee shall be in accordance with the form of bid security included under Section 7- Stage 1 Submission Forms of this Bidding Document.
- 18.3 Any Bid not accompanied by an acceptable Bid Security shall be rejected by the Employer as non-responsive.
- 18.4 The Bid Security submitted for Stage 1 shall be:
- a) returned to disqualified Bidders under Stage 1, as promptly as practicable following notification of the outcome of the Stage 1 Bidding Process, subject to completion of any applicable standstill period; and
 - b) retained by the Employer as one of the requirements under Stage 2 Bidding Document for the qualified Bidder in addition to the requirements under Stage 2 Bidding process. The validity of the Bid Security shall be extended by such duration as stipulated under Stage 2 Bidding Document.
- 18.5 The Bid Security required for Stage 2 Bidding Process shall be submitted separately by the Bidders invited to participate in the Stage 2 Bidding Process.
- 18.6 The Bid Security shall be forfeited if:
- a) the Bidder withdraws its Bid or varies any terms and conditions thereof during the period of Bid Validity;
 - b) the Bidder engages in corrupt, fraudulent, collusive or coercive practices under Clause 35 [Corrupt or Fraudulent Practices], or commits a default under the Integrity Pact; or
 - c) the Bidder, having been notified by the Employer that it has successfully qualified at Stage 1 and is eligible to proceed to Stage 2, fails or refuses, without justifiable reason, to participate in the Stage 2 Bidding Process.

19 Pre-Bid Meeting

- 19.1 **No Pre-Bid Meeting** shall be conducted for the Stage 1 Bidding Process. However, Bidders may seek clarification on the Bidding Documents in accordance with the provisions of Clause 10 [Clarification of Bidding Documents]. The Employer shall respond to such clarification requests in writing and, where necessary, issue an Addendum to the Bidding Documents.

20 Format and Signing of Bid

- 20.1 The Bidder shall prepare the documents comprising the Bid as described in Clause 13 [Documents Comprising the Bid] of these Instructions to Bidders.
- 20.2 The Bid shall be signed by a person duly authorized to sign on behalf of the Bidder, pursuant to Sub-clause 5.1a. as the case may be.
- 20.3 The Bids shall be signed as under:
- a) If the Bid is submitted by an individual, it shall be signed by the proprietor above his full name and name of the firm with its current business address.



Section 2 – Instruction to Bidder (ITB)

- b) If the Bid is submitted by a proprietary firm, it shall be signed by the proprietor.
- c) If the Bid is submitted by a firm in partnership, it shall be signed by a partner holding the power of attorney. A certified copy of the partnership deed duly registered and current business address of all the partners of the firm shall also accompany the Bid.
- d) If the Bid is submitted by a limited company, it shall be signed by a duly authorized person holding the power of attorney together with a Board resolution in this regard for signing the Bid, in which case a certified copy of the power of attorney supported with resolution of Board of Director shall accompany the Bid. Such limited company may be required to furnish satisfactory evidence of its existence before the contract is awarded.
- e) All witnesses and sureties shall be persons of status and their full names, occupations and addresses shall be stated below their signatures.

D. SUBMISSION OF BIDS

21 Preparation and Submission of Bids

- 21.1 Except for Bid Security, which shall be submitted in Original form, the Bidder shall submit the Bid electronically by the date and time stipulated in the BDS. The electronic Bid shall be password-protected by the Bidder. The Bidder shall communicate the password to the Employer within the period specified in the BDS.
- 21.2 The Bid should be serially numbered and properly indexed, mentioning all constituents of the Bid, including any enclosures/attachments and their corresponding page numbers or file names. Failure to submit the Bid in a systematic manner as above may result in oversight of any important information provided by the Bidder, for which the Employer shall not be responsible.
- 21.3 The Bidder shall ensure that the electronic Bid is complete, readable, accessible and capable of being opened using the password communicated at the specified time.
- 21.4 The Bidder shall be responsible for the timely and successful submission of its Bid, including uploading/transmission of all required documents in the prescribed format and within the deadline specified in the BDS. The Bid received late or after the prescribed due date and time will not be entertained.
- 21.5 All instructions in this respect contained in this Bidding Document and Addenda, if any, shall be followed.
- 21.6 No Financial Proposal or other price-sensitive information shall be submitted as part of the Stage 1 Bid.

22 Deadline for Submission of Bids

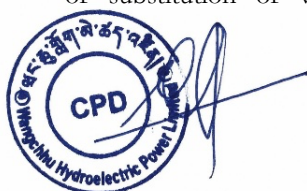
- 22.1 Complete Bids must be received by the Employer at the address, date and time stipulated in the Bid Data Sheet. In the event of the specified date for the submission of bids being declared a holiday for the Employer, the bids will be received up to the specified time on the next working day.
- 22.2 The corresponding time for communication of the password and opening of Bids shall also be rescheduled accordingly, and the Employer shall notify the Bidders through the same official means used for publication of the Invitation for Qualification and Technical Proposal.
- 22.3 The Employer may, in exceptional circumstances and at its discretion, extend the deadline for submission of bids by issuing an Addendum in accordance with Clause 11[Amendment to Bid Documents], in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

23 Late Bids

- 23.1 Bids, if received by the Employer after the deadline for submission of Bids prescribed in Bid Data Sheet, will be considered as “Late Bid” and shall remain unopened.

24 Modification, Substitution and Withdrawal of Bids

- 24.1 The Bidder may modify, substitute, or withdraw his bid after its submission but in any case before the official deadline for submission mentioned in Bid Data under clause 22 [Deadline for Submission of Bids] by giving modification or substitution or withdrawal notice in writing to the Employer. The Bidder's modification or substitution or withdrawal notice shall be prepared, and clearly marked as “modification” or “substitution” or “withdrawal” as appropriate and delivered prior to the Bid Due Date and Time



24.2 Any alteration/modification in the Bid or additional information supplied subsequently to the Bid Due Date and time, shall be disregarded.

24.3 Withdrawal of a Bid during the interval between the deadline for submission of Bids and expiration of the period of Bid validity specified in Clause 17 [Bid Validity] shall result in the forfeiture of the Bid Security pursuant to Sub-Clause 18.6 hereby.

E. BID OPENING AND EVALUATION

25 Bid Opening

25.1 The Employer will open the Bids in the presence of Bidders' designated representatives who choose to attend (physically or virtually), at the time, date, and location stipulated in the Bid Data.

25.2 The Bidders' representatives who are present shall sign a register evidencing their attendance. No Bid shall be rejected at the Bid opening except for the conditions stipulated under clause 23 [LATE BIDS].

25.3 At the time of opening, all important information and any such other details as the Employer may consider appropriate, will be announced by the Employer. This shall include but may not be limited to the Bidders' names, the presence (or absence) of bid security, etc.

26 Process to be Confidential

26.1 Information relating to the examination, clarification, evaluation and comparison of bids, and recommendations shall not be disclosed to bidders or any other persons not officially concerned with such process until the notification of the outcome of Stage 1 bidding. Any effort by a bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of the bidder's bid.

27 Clarification of Bids during Evaluation

27.1 To facilitate the evaluation of Bids, the Employer may request a Bidder to clarify information or documentary evidence submitted as part of its Bid.

27.2 Any clarification requested by the Employer shall be limited to explaining or confirming information already contained in the Bid and shall not permit the Bidder to:

- i) modify or revise its Bid;
- ii) submit information that materially enhances its qualifications;
- iii) rectify any material omission or deficiency;
- iv) alter the substance of its Bid; or
- v) obtain any unfair competitive advantage.

27.3 Any clarification submitted by the Bidder shall form part of the Bid solely for the purpose of evaluation.

27.4 Failure of the Bidder to respond to a request for clarification within the period specified by the Employer may result in the Bid being determined Non-Responsive or the Bidder being determined Not Qualified, as applicable.

28 Examination of Bids and Determination of Responsiveness

28.1 The basis and methodology for evaluating the bids submitted for the Stage 1 bidding shall generally be based on the Section-4 of this Bidding Document (Qualification and Technical Requirements Criteria). Further, the Employer will examine the bids to determine whether they are complete, whether required securities have been furnished, whether the documents have been properly signed, whether all the requisite declaration, undertakings have been furnished and whether the bids are generally in order.

28.2 Prior to the detailed evaluation, the Employer will determine whether each Bid is of acceptable quality, is complete and is substantially responsive to the Bid documents. For purposes of this determination, a substantially responsive Bid is one that conforms to all the terms, conditions and specifications of the Bid documents without material deviations, objections, conditionality or reservations. A material deviation, objection, conditionality or reservation is one:

- i) that affects in any substantial way the scope, quality or performance of the Contract;
- ii) that limits in any substantial way, inconsistent with the Bid documents, the Employer's rights or the successful Bidder's obligations under the Contract;



The Employer's determination of a Bid's responsiveness is to be based on the content of the Bid itself without recourse to extrinsic evidence.

- 28.3 If a Bid is not substantially responsive, it will be rejected by the Employer, and shall not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.
- 28.4 All the bidders shall be informed, about their status of qualification, disqualification, or responsiveness, in a single letter.

29 Evaluation and Comparison of Bids

- 29.1 The Qualification and Technical Proposals submitted by the Bidders shall be evaluated in accordance with the Qualification and Technical Requirements Criteria specified under Section 4 of the Stage 1 Bidding Documents.
- 29.2 The Employer shall determine whether each Bidder meets the prescribed eligibility, qualification, experience, technical capability, and other requirements specified in the Bidding Documents.

F. NOTIFICATION OF THE OUTCOME OF STAGE 1 BIDDING PROCESS

30 Determination of Qualified Bidders

Bidders determined to meet the qualification and technical requirements specified in the Bidding Documents shall be considered qualified under Stage 1 and eligible to proceed to Stage 2 of the Bidding Process.

31 Employer's right to accept any Bid and to reject any or all Bids

- 31.1 The Employer reserves the right to accept or reject any Bid, or cancel/withdraw invitation to Bid for any reason including national defense and security considerations, and annul the bidding process and reject all Bids at any time, without thereby incurring any liability to the affected Bidder(s).

32 Notification of outcome of Stage -1 Bidding Process

- 32.1 Prior to the expiry of the period of validity of the Stage 1 Qualification and Technical Proposals, the Employer shall notify all Bidders, in writing, of the outcome of the Stage 1 evaluation.
- 32.2 Bidders whose Stage 1 Qualification and Technical Proposals have been determined to meet the qualification and technical requirements specified in the Bidding Documents shall be notified of their eligibility to proceed to Stage 2 of the Bidding Process. Their participation in Stage 2 shall be subject to the Stage 2 procurement approach adopted by the Employer and the procedures specified in the Bidding Documents.
- 32.3 Bidders whose Stage 1 Qualification and Technical Proposals have been determined not to meet the qualification and/or technical requirements specified in the Bidding Documents shall be notified that they are not eligible to proceed to Stage 2 Bidding Process.
- 32.4 The notification to an unsuccessful Stage 1 Bidder shall inform the Bidder of its right to request a debriefing in accordance with the provisions of Debriefing by the Employer contained in these Bidding Documents.
- 32.5 The notification of the Stage 1 outcome shall not constitute a Letter of Intent, Letter of Acceptance or award of Contract.

33 Signing of Agreement

The Contract Agreement shall be signed only after completion of Stage 2 Bidding and in accordance with the provisions of the Bidding Documents issued for Stage 2 Bidding Process.

34 Performance Security

Performance Security shall not be applicable during the Stage 1 Bidding Process. The requirement for Performance Security shall apply only during Stage 2 of the Bidding Process.

35 Corrupt or Fraudulent Practices

- 35.1 It is expected from the Bidders that they will observe the highest standard of ethics during the bidding process. In pursuance of this policy:



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Section 2 – Instruction to Bidder (ITB)

- a) For the purpose of this provision, the terms set-forth below shall mean as under:
 - i) “corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in Contract execution.
 - ii) “fraudulent practice” means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a Contract.
 - iii) “collusive practice” means a scheme or arrangement between two or more bidders, with or without the knowledge of Client, designed to establish bid prices at artificial, non-competitive levels.
 - iv) “coercive practice” means harming or threatening to harm, directly or indirectly, a person or their property to influence or affect the execution of Contract.
 - v) “Integrity Pact” means an agreement signed between the Contractor and the Employer committing the persons/officials of both the parties, not to exercise any corrupt influence on any aspect of the Tender/Contract.
- b) An agreement, Integrity Pact between the prospective Bidders and the Employer shall be signed committing the persons/officials of both the parties, not to exercise any corrupt influence on any aspect of the Tender/Contract.
- c) A Bid shall be rejected by the Employer if it is determined at any stage that respective Bidder has engaged in corrupt or fraudulent or collusive or coercive practices or defaulted commitments under Integrity Pact in competing for or in executing the Contract in question, and his Bid Security shall be forfeited. The Contractor shall not be entitled for any compensation whatsoever under this clause.
- d) The Employer may declare a bidder ineligible, either indefinitely or for a stated period of time, to be awarded a Contract if it at any time determines that the bidder has engaged in corrupt or fraudulent or collusive or coercive practices in competing for, or in executing a Contract.
- e) The documents/information submitted by Bidder may be verified by the officials of the Employer for its authenticity at any time and the Contractor shall provide all facilities/co-operation in this regard. If it is found that any of the documents/information submitted by the Contractor is not genuine, the Employer shall have full rights to cancel his Bid, forfeit the bid security.

36 Debriefing by the Employer

- a) Upon receipt of the Employer's Notification of the Outcome of the Stage 1 Bidding Process, an unsuccessful Bidder may, within five (5) days of receipt of such notification, submit a written request to the Employer for a debriefing.
- b) The purpose of the debriefing shall be to inform the unsuccessful Bidder of the reasons for its lack of success in Stage 1, including the specific shortcomings identified in its Stage 1 Bid, without disclosing confidential, commercially sensitive or proprietary information relating to other Bidders.
- c) Where a request for debriefing is received within the period specified in paragraph 1 above, the Employer shall provide the debriefing within five (5) days of receipt of the request.
- d) The debriefing may be provided in writing or, at the discretion of the Employer, through a meeting with the Bidder. Where a debriefing meeting is held, the Bidder shall bear its own costs of attending the meeting.



SECTION 3 - BID DATA SHEET (BDS)

The following specific data shall complement, amend, or supplement the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in Instructions to Bidders.

Instructions to Bidders (ITB) Clause Reference	
1.1	Name and Address of the Employer: Wangchhu Hydroelectric Power Limited (WHPL), Post Box No. 202, Dhoewa Lam, Phuentsholing, Bhutan
1.2	Period of Completion: 48 Months
3.1	This bidding is open to: International Competitive Bidding (ICB)
6	Specialist Subcontractors: The proposed Specialist Subcontractors and the corresponding specialized work shall be subject to the Employer's approval. The Bidder shall remain fully responsible for the execution and performance of all Works, including the Works undertaken by the Specialist Subcontractors
6.2	Maximum number of members including the Lead member in the Joint Venture (JV) shall be: 2 (two).
10	Last date for receipt of queries on Bidding Document: 10 September 2026, 17hrs (BST) Address for submitting queries: General Manager (CPD) Wangchhu Hydroelectric Power Limited (WHPL) Post Box No. 202, Dhoewa Lam, Phuentsholing, Bhutan Mobile No.: +975 17767216 Email: gm.cpd@whpl.bt
12	The language of the Bid is: English
15	Bid Price: No price bid or financial proposal shall be submitted at Stage 1 Bidding Process.
17.1	Period of Bid Validity: until 23 December 2026
18	Bid Security: BTN 78,000,000 (Bhutanese Ngultrum Seventy Eight Million only). Validity of Bid Security: The Bid Security shall remain valid until 22 January 2027. Form of Bid Security: The Bid Security shall be in the form of a Cash Warrant or an irrevocable unconditional bank guarantee issued by a bank/financial institution in Bhutan or by a foreign bank, provided that the guarantee issued by a foreign bank is confirmed by, and enforceable through, a bank/financial institution in Bhutan.
19	Pre-bid meeting: No Pre-Bid Meeting shall be conducted for the Stage 1 Bidding Process. Bidders may seek clarification of the Bidding Documents in accordance with ITB Clause 10 [Clarification of Bidding Documents].
21	The electronic Bid submission is allowed: The password for opening the electronic Bid shall not be submitted together with the Bid. The Bidder shall communicate the password to the Employer between 15:00 hrs and 15:30 hrs (BST) on 24 September 2026, through the email address specified in the BDS. The password shall not be communicated before 15:00 hrs (BST).
21	Employer's address for the purpose of bid submission: General Manager (CPD) Wangchhu Hydroelectric Power Limited Post Box No. 202, Dhoewa Lam, Phuentsholing, Bhutan



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Stage 1 Qualification and Technical Proposals
Section 3 – Bid Data Sheet

Instructions to Bidders (ITB) Clause Reference	
	Email: gm.cpd@whpl.bt
22.1	Deadline for submission of Bid: Time and Date: 24 September 2026 until 14.30 hrs (BST).
25.1	Venue, time and date of bid opening: Venue: Corporate Office, Wangchhu Hydroelectric Power Limited Phuentsholing, Bhutan. Time and Date: 24 September 2026 at 15.30 hrs (BST)
27	Failure to Provide Clarification during Bid Evaluation: Failure to respond to the Employer's clarification request within the specified period may result in the Bid being deemed Non-Responsive or the Bidder being deemed Not Qualified, as applicable.
32	Notification of the Outcome of Stage 1 bidding process: The Employer will notify the outcome of the Stage1 Bidding Process to all the participating bidders.
36	Requests for debriefing received after the deadline specified in ITB Clause 36(a) shall not be considered.



SECTION 4 - QUALIFICATION AND TECHNICAL EVALUATION REQUIREMENTS AND CRITERIA

1 INTRODUCTION

This document sets out the Qualification and Technical Requirements Criteria for the procurement of Contract Package WC II – HRT: Construction of HRT from Chainage 588 to Chainage 11+225 and its Associated Adits including Hydro-Mechanical Gates for the 570 MW Wangchhu Hydroelectric Project (“Project”).

This document also establishes a transparent, objective, and consistent framework for evaluating the qualifications of all Bidders and provides the basis for determining whether a Bidder possesses the capability and capacity to successfully execute and complete the Works.

Qualification under this document confirms only that a Bidder has satisfied the prescribed qualification requirements. It does not constitute acceptance of a Bid, create any contractual relationship between the Employer and the Bidder, or confer any right or entitlement to the award of the Contract.

1.1 Procurement Strategy

The Works shall be procured through a two-stage procurement process comprising:

- i) Stage 1 – Qualification and Technical Evaluation; and
- ii) Stage 2 – Financial Evaluation and Contract Award.

Stage 1 is intended to assess the legal eligibility, financial capacity, technical competence, organisational capability, project experience, construction resources, and Environmental, Social, Health and Safety (ESHS) capability of each Bidder. The evaluation shall be conducted in accordance with the qualification requirements and technical evaluation criteria specified in this document.

Only Bidders determined to be Qualified under Stage 1 shall be eligible to participate in Stage 2.

Stage 2 may be conducted using either of the following approaches:

- i) Competitive Financial Bidding; or
- ii) Direct Commercial Negotiation

The Employer shall determine the appropriate Stage 2 approach for each Contract Package prior to commencement of the commercial process, taking into consideration the Project implementation schedule, level of competition, availability of reliable benchmark rates, prevailing market conditions, procurement risks, and value for money.

The selection of the Stage 2 approach shall not affect the qualification requirements established under Stage 1, which shall apply equally to all Bidders.

The Employer shall notify all Qualified Bidders of the Stage 2 approach to be adopted for the relevant Contract Package before issuing the Stage 2 Bidding Documents or commencing commercial negotiations.

1.2 Objectives

The objectives of the Qualification and Technical Evaluation are to:

- i) assess the legal eligibility and financial capacity of each Bidder;
- ii) assess the Bidder's technical competence and relevant experience in executing works of comparable nature, scale, and complexity;
- iii) evaluate the availability of suitably qualified Key Personnel, Construction Plant and Equipment, and other resources required for successful execution of the Works;
- iv) assess the Bidder's organisational capability and management systems;
- v) assess the Bidder's capability to manage Environmental, Social, Health and Safety (ESHS) obligations throughout the Contract Period;
- vi) establish a fair, transparent, objective, and consistent basis for evaluating all Bidders; and
- vii) minimise the risk of contractor non-performance and promote successful implementation of the Project.



Section 4 –Qualification and Technical Evaluation Requirements and Criteria

1.3 Scope

The Qualification and Technical Evaluation shall include an assessment of the following:

- i) Eligibility.
- ii) Financial Capacity.
- iii) General Construction Experience.
- iv) Specific Tunnelling and Hydropower Experience.
- v) Organisation and Key Personnel.
- vi) Construction Plant and Equipment.
- vii) Construction Methodology and Construction Programme.
- viii) Environmental, Social, Health and Safety (ESHS) Capability.
- ix) Joint Venture and Specialist Subcontractor arrangements, where applicable.

Each qualification requirement shall be assessed independently in accordance with the requirements and criteria specified in this document.

1.4 Evaluation Method

Unless otherwise specified in the Bidding Documents, all qualification requirements shall be assessed on a Pass/Fail basis.

A Bidder shall be determined to be Qualified only where it demonstrates full compliance with all mandatory qualification requirements and submits the documentary evidence required under the Bidding Documents.

Failure to satisfy any mandatory qualification requirement or to submit the required documentary evidence may result in the Bidder being determined Not Qualified.

The Qualification and Technical Evaluation is intended solely to determine the Bidder's capability and capacity to execute and complete the Works. It does not constitute the Stage 2 Financial Evaluation or create any obligation on the Employer to invite the Bidder to participate in Stage 2 or to award the Contract.

2 EVALUATION PRINCIPLES

The Employer shall evaluate all Bids in accordance with the requirements of the Bidding Documents and the procedures set out in this document.

The evaluation shall be conducted in a fair, transparent, objective, and consistent manner, ensuring equal treatment of all Bidders throughout the procurement process.

Only the qualification requirements, evaluation criteria, and procedures expressly specified in the Bidding Documents shall be applied.

2.1 Basis of Evaluation

The Qualification and Technical Evaluation shall be based solely on the information and documentary evidence submitted by the Bidder on or before the Bid Submission Deadline.

Each Bid shall be evaluated independently against the qualification requirements specified in this document.

Unless otherwise specified, all qualification requirements shall be assessed on a Pass/Fail basis. A Bidder shall be determined to be Qualified only if it satisfies all mandatory qualification requirements.

Information submitted after the Bid Submission Deadline shall not be considered unless requested by the Employer as a clarification in accordance with the Bidding Documents.

2.2 Confidentiality and Equal Treatment

The Employer shall apply the qualification requirements and evaluation criteria consistently to all Bidders and shall not provide preferential treatment to any Bidder.



The evaluation process shall be conducted on a confidential basis. Information relating to the examination, clarification, evaluation, and recommendation of Bids shall not be disclosed to any person not officially concerned with the procurement process, except as required by the Bidding Documents or applicable laws.

3 QUALIFICATION AND TECHNICAL EVALUATION PROCESS

The evaluation of Bids shall be conducted in two distinct stages to ensure that Contracts are awarded only to Bidders that possess the legal, financial, technical, and organisational capability necessary to successfully execute the Works.

The evaluation process shall be undertaken in accordance with the requirements of the Bidding Documents and the procedures set out in this document. All evaluations shall be conducted in a fair, transparent, objective, and consistent manner.

3.1 Stage 1 – Qualification and Technical Evaluation

Stage 1 shall comprise the evaluation of the Bidder's Qualification and Technical Proposals.

The purpose of Stage 1 is to determine whether the Bidder possesses the minimum capability, experience, resources, and organisational capacity required to execute the Contract.

Each qualification requirement shall be assessed independently on a Pass/Fail basis in accordance with the requirements specified in this document.

Only Bidders that satisfy all mandatory qualification and technical requirements shall be determined to be Qualified.

3.2 Stage 2 – Financial Evaluation

Only Bidders determined to be Qualified under Stage 1 shall be eligible to participate in Stage 2.

Stage 2 shall be conducted using one of the following approaches, as determined by the Employer in accordance with the approved Contract Award Strategy.

3.2.1 Competitive Financial Bidding

Under this approach, Qualified Bidders shall be invited to submit Financial Bids based on the final Employer's Requirements, Conditions of Contract, and Bills of Quantities. The Financial Bids shall be evaluated in accordance with the methodology specified in the Stage 2 Bidding Documents to determine the Lowest Evaluated Responsive Bid or the Most Advantageous Bid, as applicable.

3.2.2 Direct Commercial Negotiation

Under this approach, the Employer may invite one or more technically qualified Bidders to participate in commercial negotiations using benchmark or reference Bills of Quantities (BOQ) rates established from comparable hydropower projects, prevailing market rates, and other relevant cost information. The objective of the negotiations shall be to achieve a fair, reasonable, and commercially acceptable Contract Price while maintaining transparency, value for money, and timely implementation of the Project.

3.3 Verification of Continued Qualification

Before recommending a Bidder for Contract Award, the Employer may verify that the preferred Bidder continues to satisfy the qualification requirements established under Stage 1.

The verification may include confirmation of the Bidder's financial capacity, availability of key personnel, construction plant and equipment, litigation status, organisational capability, and any other information considered necessary by the Employer.



Where the Employer determines that the Bidder no longer satisfies the qualification requirements, the Employer may reject the Bidder and proceed in accordance with the procedures specified in the Bidding Documents.

4 QUALIFICATION REQUIREMENTS

The qualification requirements specified in this Section establish the minimum standards that each Bidder shall satisfy to be determined Qualified for the execution of the Works.

The qualification requirements assess the Bidder's legal standing, financial capacity, technical competence, organisational capability, relevant project experience, availability of Construction Plant and Equipment, Construction Methodology and Construction Programme, Environmental, Social, Health and Safety (ESHS) capability, and, where applicable, Joint Venture and Specialist Subcontractor arrangements necessary to successfully execute and complete the Works in accordance with the Contract.

The Employer shall assess the Bidder against the qualification requirements specified in this Section based on the documentary evidence submitted with the Bid.

Unless otherwise specified, each qualification requirement shall be assessed independently on a Pass/Fail basis in accordance with the applicable qualification requirements and evaluation criteria.

4.1 Eligibility

The Employer shall assess the Bidder's eligibility to determine whether the Bidder is legally entitled to participate in the procurement process and possesses the legal capacity to enter into and perform the Contract.

4.1.1 Eligibility Requirements

The Bidder shall satisfy all eligibility requirements specified in the Bidding Documents, including, but not limited to, the following as shown in the Table 4.1:



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Stage 1 Qualification and Technical Proposals
Section 4 –Qualification and Technical Evaluation Requirements and Criteria

Table 4.1 Eligibility Requirements

SN	Qualification Requirement	Minimum Requirement	Single Entity	Joint Venture (Existing or Intended)			Documentary Evidence	Assessment
				All Members Combined	Each Member	At Least One Member		
1	Legal Status	Be a legally established entity.	Must comply	N/A	Must comply	N/A	Certificate of Incorporation or Business Registration	Pass/Fail
2	Eligible Country	Be incorporated in an eligible country.	Must comply	N/A	Must comply	N/A	Certificate of Incorporation or Business Registration, Declaration of Eligibility	Pass/Fail
3	Legal Capacity	Have the legal capacity to enter into the Contract.	Must comply	N/A	Must comply	N/A	Constitutional Documents, Power of Attorney	Pass/Fail
4	Conflict of Interest	Have no conflict of interest affecting the procurement.	Must comply	N/A	Must comply	N/A	Declaration of Conflict of Interest	Pass/Fail
5	Debarment	Not be suspended or debarred under the applicable procurement framework.	Must comply	N/A	Must comply	N/A	Declaration of Eligibility	Pass/Fail
6	Sanctions	Not be subject to sanctions that prohibit participation.	Must comply	N/A	Must comply	N/A	Declaration of Eligibility	Pass/Fail
7	Integrity	Comply with applicable anti-fraud, anti-corruption, and ethical requirements.	Must comply	N/A	Must comply	N/A	Integrity Declaration	Pass/Fail
8	SEA/SH Compliance	Meet the applicable requirements relating to Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH).	Must comply	N/A	Must comply	N/A	SEA/SH Declaration or equivalent declaration required under the Bidding Documents	Pass/Fail
9	Statutory Compliance	Comply with the applicable laws of the Kingdom of Bhutan.	Must comply	N/A	Must comply	N/A	Declaration of Compliance	Pass/Fail
10	Litigation History	Bidder to declare any litigation cases in the past 5 years	Must comply	N/A	Must comply	N/A	Declaration of Compliance	Pass/Fail



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Notes

1. *Each Joint Venture member shall independently satisfy all eligibility requirements specified in Table 4.1.*
2. *The failure of any Joint Venture member to satisfy an eligibility requirement shall result in the Joint Venture being determined Not Qualified.*
3. *Documentary evidence shall be current, valid, and issued by the appropriate competent authority, where applicable.*
4. *The Employer reserves the right to verify any information or documentary evidence submitted by the Bidder in accordance with Section 6 of this Section 4 document*



4.1.2 Documentary Evidence

The Bidder shall submit documentary evidence demonstrating compliance with the eligibility requirements specified in Table 4.1.

The documentary evidence shall include, as applicable:

- i) Certificate of Incorporation, Business Registration Certificate, or equivalent legal registration documents;
- ii) Constitutional documents demonstrating the legal status and legal capacity of the Bidder;
- iii) Power of Attorney authorising the signatory to submit the Bid and execute the Bid documents on behalf of the Bidder;
- iv) Declaration confirming eligibility, including compliance with the requirements relating to conflict of interest, debarment, sanctions, integrity, and statutory compliance;
- v) Declaration confirming compliance with the applicable requirements relating to Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH); and
- vi) any other documentary evidence specified in the Bidding Documents.

Where the Bid is submitted by a Joint Venture, each Joint Venture member shall submit the documentary evidence applicable to its respective eligibility requirements.

4.2 Financial Capacity

The Employer shall assess the Bidder's financial capacity to determine whether the Bidder possesses the financial resources and financial strength necessary to execute and complete the Works.

4.2.1 Financial Qualification Requirements

The Bidder shall satisfy the minimum financial qualification requirements specified in Table 4.2.



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 Stage 1 Qualification and Technical Proposals
Section 4 –Qualification and Technical Evaluation Requirements and Criteria

Table 4.2 – Financial Qualification Requirements

SN	Qualification Requirement	Minimum Requirement	Single Entity	Joint Venture (Existing or Intended)			Documentary Evidence	Assessment
				All Members Combined	Each Member	Lead Member		
1	Access to Financial Resources	Access to liquid assets, committed lines of credit, or other financial resources, excluding advance payments under the Contract, equivalent to BTN 776 million.	Must comply	Must comply	BTN 78 million	N/A	Bank certificates, committed credit facilities, or equivalent financial instruments issued within 28 days prior to the Bid Submission Deadline.	Pass/Fail
2	Net Worth	Positive net worth based on the latest audited financial statements.	Must comply	Must comply	Must comply	Must comply	Audited financial statements.	Pass/Fail
3	Average Annual Construction Turnover	Average annual construction turnover of not less than BTN 2,911 million (average annual cash flow requirement of the Contract, calculated using the three highest annual turnovers achieved during the last five financial years).	Must comply	Must comply	BTN 291 million	N/A	Audited financial statements certified by an independent auditor.	Pass/Fail



4.2.2 Documentary Evidence

The Bidder shall submit documentary evidence demonstrating compliance with the financial capacity requirements specified in Table 4.2.

The documentary evidence shall include, as applicable:

- i) audited financial statements for the last five (5) financial years, certified by an independent auditor;
- ii) bank certificates, committed lines of credit, or other documentary evidence demonstrating access to financial resources, issued not more than twenty-eight (28) days prior to the Bid Submission Deadline;
- iii) financial statements or certificates demonstrating the Bidder's net worth;
- iv) documentary evidence supporting the calculation of the average annual construction turnover; and
- v) any other financial information specified in the Bidding Documents.

Where the Bid is submitted by a Joint Venture, each Joint Venture member shall submit the financial information applicable to its respective financial obligations under the Bid.

4.3 General Construction Experience

The Employer shall assess the Bidder's general construction experience to determine whether the Bidder possesses the organisational capability, management expertise, and practical experience necessary to execute and complete the Works.

4.3.1 General Construction Experience Requirements

The Bidder shall satisfy the minimum general construction experience requirements specified in Table 4.3.

Table 4.3 – General Construction Experience

Qualification Requirement	Minimum Requirement	Assessment
General Construction Experience	Minimum fifteen (15) years' experience as a Prime Contractor, Joint Venture Member, or Specialist Contractor in major civil engineering works.	Pass/Fail
Comparable Infrastructure Experience	Successful completion of major infrastructure projects demonstrating capability in planning, execution, contract management, quality management, and project delivery.	Pass/Fail
Contract Management Experience	Demonstrated experience in administering contracts of comparable value, complexity, and duration.	Pass/Fail

4.3.2 Documentary Evidence

The Bidder shall submit documentary evidence demonstrating compliance with the general construction experience requirements specified in Table 4.3.

The documentary evidence shall include, as applicable:

- i) company profile, including details of the Bidder's organisation, principal business activities, and years of operation;
- ii) project reference list summarising completed and ongoing projects relevant to the qualification requirements;
- iii) completion certificates, taking-over certificates, or equivalent documents issued by the Employer for completed projects;
- iv) Employer's certificates or performance certificates confirming the satisfactory completion of the Works, where available;
- v) contract summaries indicating the scope of work, contract value, commencement and completion dates, and the Bidder's contractual role; and
- vi) any other documentary evidence specified in the Bidding Documents.



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Where experience is claimed through participation in a Joint Venture, the Bidder shall clearly identify its percentage participation and the scope of work performed under the respective contract.

4.4 Specific Tunnelling and Hydropower Experience

The Employer shall assess the Bidder's specific project experience to determine whether the Bidder possesses the technical competence, specialised construction capability, and relevant project experience necessary to execute and complete the Works.

4.4.1 Specific Experience Requirements

The Bidder shall satisfy all the minimum specific experience requirements specified in Table 4.4.

Table 4.4 – Specific Tunnel Construction and Hydropower Experience

Qualification Requirement	Minimum Requirement	Assessment
Similar Head Race Tunnel and Underground Works	Successful execution of concrete lined tunnels of comparable scope and complexity with a minimum finished diameter of 5.5 m and a cumulative completed length of at least 7.5 km using drill and blast excavation methods under a single project.	Pass/Fail
Large Diameter Tunnel Excavation	Successful execution of heading and bench excavation for tunnels having an excavated area of at least 45 m ² under a single project.	Pass/Fail
Construction Adits	Successful construction of at least two D shaped construction Adits, each having minimum dimensions of 6 m × 6 m, including portal development in challenging geological conditions under a single project.	Pass/Fail
Structural Concrete Lining	Successful placement of at least 80,000 m ³ of structural concrete lining in underground tunnels using collapsible sliding forms, gantries, or equivalent systems under a single project.	Pass/Fail
Contract Complexity	Successful execution of contracts demonstrating engineering complexity, construction methodology, geological conditions, environmental constraints, construction duration, and contractual responsibilities comparable to those of the Works.	Pass/Fail

Notes:

- The experience specified in Table 4.4 shall have been obtained within the last twenty (20) years preceding the Bid Submission Deadline.*
- Where experience is claimed through participation in a Joint Venture, only the portion of the Works for which the Bidder was contractually responsible shall be considered.*
- Multiple contracts shall not be combined to satisfy a qualification requirement that expressly requires experience under a single project.*
- The Employer reserves the right to verify any information submitted by the Bidder in accordance with Section 6 of this Section 4 document.*

4.4.2 Documentary Evidence

The Bidder shall submit documentary evidence demonstrating compliance with the specific experience requirements specified in Table 4.4.

The documentary evidence shall include, as applicable:

- Completion Certificates, Taking Over Certificates, or equivalent documents issued by the Employer;
- Employer's Certificates or Performance Certificates confirming the satisfactory completion of the Works;
- Contract Agreements or Contract Data demonstrating the Bidder's contractual role and scope of work;
- Technical data demonstrating compliance with the qualification requirements, including structural dimensions, excavation quantities, concrete quantities, tunnel dimensions, installed capacity, and Hydro Mechanical Works, as applicable;



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- v) Certified construction records, progress reports, or other documentary evidence supporting the quantities executed, where applicable;
- vi) Joint Venture Agreements identifying the Bidder's percentage participation and scope of work, where experience is claimed through a Joint Venture; and
- vii) Any other documentary evidence specified in the Bidding Documents.

Where the documentary evidence does not clearly demonstrate compliance with the qualification requirements, the Employer may request clarification in accordance with Section 6.

4.5 Organisation and Key Personnel

The Employer shall assess the Bidder's organisational capability and proposed Key Personnel to determine whether the Bidder possesses the management structure, technical expertise, and professional resources necessary to execute and complete the Works.

4.5.1 Key Personnel Requirements

The Bidder shall propose suitably qualified and experienced Key Personnel meeting the minimum requirements specified in Table 4.5.

Table 4.5 – Minimum Key Personnel

Position	Minimum No.	Minimum Qualification	Minimum Professional Experience	Minimum Similar Experience	Assessment
Project Manager	1	Bachelor's Degree in Civil Engineering	15 Years	10 years' experience on hydropower or Head Race Tunnel projects, including experience as Project Manager on at least one comparable underground works project	Pass/Fail
Planning and Monitoring Manager	1	Bachelor's Degree in Civil Engineering	10 Years	5 years' experience in planning and scheduling of major underground or heavy civil works	Pass/Fail
Civil Engineer	5	Bachelor's Degree in Civil Engineering	10 Years	5 years' experience in Head Race Tunnel, underground works, or heavy civil construction	Pass/Fail
Mechanical Engineer	1	Bachelor's Degree in Mechanical Engineering	10 Years	5 years' experience in tunnel construction equipment, Hydro Mechanical installation, or heavy construction equipment	Pass/Fail
Electrical Engineer	2	Bachelor's Degree in Electrical Engineering	10 Years	5 years' experience in construction power systems, underground works, or hydropower projects	Pass/Fail



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Position	Minimum No.	Minimum Qualification	Minimum Professional Experience	Minimum Similar Experience	Assessment
Equipment and Vehicle Manager	1	Diploma or Bachelor's Degree in Mechanical Engineering	10 Years	5 years' experience managing major construction plant and equipment fleets	Pass/Fail
Geologist	2	Bachelor's Degree in Geology	10 Years	5 years' experience in engineering geology, tunnel geology, or underground excavation works	Pass/Fail
QA/QC Officer	1	Bachelor's Degree in Civil Engineering	5 Years	3 years' experience in quality assurance and quality control for major underground or heavy civil works	Pass/Fail
Surveyor	1	Diploma or Bachelor's Degree in Survey Engineering	5 Years	3 years' experience in surveying for tunnels, underground works, or major infrastructure projects	Pass/Fail
ESHS Manager	1	Bachelor's Degree in Environmental Science, Environmental Engineering, Occupational Health and Safety, or equivalent	5 Years	3 years' experience managing ESHS for major underground or infrastructure projects	Pass/Fail
Blasting Engineer / Certified Blaster	3	Recognised Blasting Certification	5 Years	3 years' experience in controlled drill and blast operations for tunnels or underground rock excavation	Pass/Fail

Notes

- The proposed Key Personnel shall satisfy the minimum qualification and experience requirements specified in Table 4.5.*
- The same individual shall not be proposed for more than one Key Personnel position.*
- Where professional registration, certification, or licensing is required by applicable laws or professional practice, the proposed Key Person shall possess a valid registration, certification, or licence issued by the relevant competent authority.*
- The Employer reserves the right to verify the qualifications, experience, availability, and professional credentials of the proposed Key Personnel in accordance with Section 6.*

4.5.2 Documentary Evidence

The Bidder shall submit documentary evidence demonstrating compliance with the Key Personnel requirements specified in Table 4.5.

The documentary evidence shall include, as applicable:

- signed Curriculum Vitae for each proposed Key Person in the format prescribed in the Bidding Documents;
- academic qualification certificates and professional certificates relevant to the proposed position;
- professional registration, licence, or certification, where applicable;
- employment records, experience certificates, or Employer's certificates demonstrating the required professional and similar project experience;



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- v) a declaration confirming the availability of each proposed Key Person for the execution of the Works; and
- vi) any other documentary evidence specified in the Bidding Documents.

Where experience is claimed on projects executed through a Joint Venture, the Bidder shall clearly demonstrate the role and responsibilities performed by the proposed Key Person on those projects.

4.6 Construction Plant and Equipment

The Employer shall assess the Bidder's Construction Plant and Equipment to determine whether the Bidder possesses, or has assured access to, adequate construction plant and equipment necessary to execute and complete the Works.

4.6.1 Plant and Equipment Requirements

The Bidder shall demonstrate the availability of the minimum Construction Plant and Equipment specified in Table 4.6.

Table 4.6 – Minimum Construction Plant and Equipment

Construction Plant and Equipment	Minimum Qty.	Minimum Technical Requirement	Assessment
Hydraulic Drill Jumbo	4	Two-boom hydraulic drill jumbo with working basket, suitable for drill and blast tunnel excavation	Pass/Fail
Hydraulic Drill ROC DTH	2	Suitable for foundation drilling, portal works, rock anchoring, and slope stabilisation	Pass/Fail
Drill Rig	2	Bauer BG 28H or equivalent	Pass/Fail
Excavator	4	Bucket capacity 1.2 to 1.5 m ³	Pass/Fail
Bulldozer	2	D80 or equivalent	Pass/Fail
Wheel Loader	2	Bucket capacity greater than 2.1 m ³	Pass/Fail
Dumper	10	Minimum payload 20 tonnes	Pass/Fail
Double Drum Roller	1	Operating weight 12 to 15 tonnes	Pass/Fail
Tower Crane	1	Minimum lifting capacity 20 tonnes	Pass/Fail
Telescopic Ring Handler	4	Suitable for handling tunnel lining forms, steel ribs, and other heavy underground construction materials	Pass/Fail
Electric Air Compressor	4	Minimum capacity 380 cfm	Pass/Fail
Aggregate Crushing Plant	2	Minimum production capacity 40 TPH	Pass/Fail
Concrete Batching Plant	4	Minimum production capacity 30 m ³ per hour	Pass/Fail
Transit Mixer	10	Minimum drum capacity 6 m ³	Pass/Fail
Concrete Pump	4	Minimum output 50 m ³ per hour	Pass/Fail
Robotic Wet Shotcrete Machine	4	Fully automated robotic wet shotcrete system suitable for underground excavation support	Pass/Fail
Dewatering Pump	5	Capacity 10 to 30 HP	Pass/Fail
Diesel Generator Set	2	Minimum capacity 500 kVA	Pass/Fail

Notes

- The Construction Plant and Equipment specified in Table 4.6 represents the minimum equipment required for qualification.
- Equipment of equivalent or higher technical capacity may be proposed, provided it satisfies the Employer's minimum technical requirements.
- The Employer may accept alternative equipment specifications where the Bidder demonstrates that the proposed equipment provides equivalent or superior performance.



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4. *The Employer reserves the right to verify the ownership, availability, condition, and technical specifications of the proposed Construction Plant and Equipment in accordance with Section 6.*

4.6.2 Documentary Evidence

The Bidder shall submit documentary evidence demonstrating compliance with the Construction Plant and Equipment requirements specified in Table 4.6.

The documentary evidence shall include, as applicable:

- i) documentary evidence demonstrating ownership of the proposed Construction Plant and Equipment;
- ii) where the equipment is not owned by the Bidder, lease agreements, hire agreements, letters of commitment, or other documentary evidence demonstrating assured access for the duration of the Contract;
- iii) manufacturer's brochures, technical specifications, or equipment data sheets demonstrating compliance with the minimum technical requirements;
- iv) equipment registration certificates, where applicable;
- v) a proposed equipment mobilisation schedule demonstrating the availability of the Construction Plant and Equipment in accordance with the Construction Programme; and
- vi) any other documentary evidence specified in the Bidding Documents.

Where the Bidder proposes to utilise equipment owned or controlled by an affiliated company, parent company, subsidiary, Joint Venture member, or Specialist Subcontractor, the Bidder shall submit documentary evidence demonstrating its legal right to utilise such equipment for the execution of the Works.

4.7 Construction Methodology and Construction Programme

The Employer shall assess the Bidder's proposed Construction Methodology and Construction Programme to determine whether the Bidder has developed a practical, technically sound and achievable approach for the execution of Works.

4.7.1 Construction Methodology and Construction Programme Requirements

The Bidder shall submit a Construction Methodology and Construction Programme satisfying the minimum requirements specified in Table 4.7.

Table 4.7 – Construction Methodology and Construction Programme

Qualification Requirement	Minimum Requirement	Assessment
Tunnel Excavation Methodology	Demonstrate a clear, logical, and technically sound methodology for tunnel excavation using drill and blast methods, including excavation sequence, advance rates, blasting practices, and excavation control.	Pass/Fail
Portal and Construction Adits Methodology	Demonstrate the proposed methodology for portal development, construction Adits, excavation support, and stabilisation measures under varying geological conditions.	Pass/Fail
Ground Support and Geological Management	Demonstrate the proposed approach for geological mapping, rock mass classification, installation of temporary and permanent ground support, and monitoring of underground excavations.	Pass/Fail
Tunnel Lining Methodology	Demonstrate the proposed methodology for structural concrete lining, including formwork systems, concrete placement, curing, quality control, and construction joints.	Pass/Fail
Ventilation, Dewatering and Underground Utilities	Demonstrate the proposed arrangements for tunnel ventilation, dust suppression, drainage, dewatering, compressed air, power supply, lighting, communication systems, and other underground utilities.	Pass/Fail



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Qualification Requirement	Minimum Requirement	Assessment
Underground Logistics and Material Handling	Demonstrate the proposed arrangements for spoil handling, material transportation, equipment movement, storage areas, emergency access, and overall underground logistics.	Pass/Fail
Resource Planning	Demonstrate the proposed deployment of Key Personnel, Construction Plant and Equipment, and other major resources required to execute the Works.	Pass/Fail
Construction Programme	Submit a preliminary Construction Programme showing the logical sequence of activities, key milestones, critical path, interfaces between work fronts, and the proposed completion period.	Pass/Fail

Notes:

1. The Construction Methodology and Construction Programme shall be consistent with the scope of the Works and the Contract requirements.
2. The Construction Programme shall demonstrate a logical and achievable sequence for the execution and completion of the Works.
3. The Construction Methodology and Construction Programme submitted for qualification purposes shall be preliminary and shall not form part of the Contract unless otherwise specified in the Bidding Documents.
4. The Employer reserves the right to seek clarification of the submitted Construction Methodology and Construction Programme in accordance with Section 6.

4.7.2 Documentary Evidence

The Bidder shall submit documentary evidence demonstrating compliance with the requirements specified in Table 4.7.

The documentary evidence shall include, as applicable:

- i) a Construction Methodology describing the proposed approach for executing the major components of the Works;
- ii) a preliminary Construction Programme prepared using recognised project scheduling software, identifying the proposed construction sequence, key milestones, critical path, and planned completion period;
- iii) resource loading schedules showing the proposed deployment of Key Personnel, Construction Plant and Equipment, and other major construction resources;
- iv) method statements for major construction activities, including temporary works, where appropriate;
- v) quality management procedures relevant to the execution of the Works;
- vi) a preliminary construction risk assessment identifying key project risks and proposed mitigation measures;
- vii) site layout drawings, logistics plans, traffic management plans, and construction access arrangements, where applicable; and
- viii) any other information specified in the Bidding Documents.

4.8 Environmental, Social, Health and Safety (ESHS) Capability

The Employer shall assess the Bidder's Environmental, Social, Health and Safety (ESHS) capability to determine whether the Bidder possesses the management systems, organisational capability, and relevant experience necessary to manage ESHS risks throughout the execution of the Works.

4.8.1 ESHS Capability Requirements

The Bidder shall satisfy the minimum ESHS capability requirements specified in Table 4.8.

Table 4.8 – Environmental, Social, Health and Safety (ESHS) Requirements



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Qualification Requirement	Minimum Requirement	Assessment
ESHS Management System	Demonstrate the implementation of an Environmental, Social, Health and Safety (ESHS) Management System appropriate to the scope and complexity of the Works.	Pass/Fail
ESHS Management Experience	Demonstrate successful implementation of ESHS management systems on major hydropower or heavy civil engineering projects of comparable scale and complexity.	Pass/Fail
ESHS Manager	Propose a qualified ESHS Manager meeting the minimum qualification and experience requirements specified in Table 4.5.	Pass/Fail
Environmental Management	Demonstrate the capability to manage environmental impacts associated with the Works, including erosion and sediment control, spoil and waste management, water quality protection, dust and noise control, biodiversity protection, and site restoration.	Pass/Fail
Occupational Health and Safety	Demonstrate the capability to manage occupational health and safety risks associated with construction activities, including excavation, blasting, lifting operations, working at height, confined spaces, temporary works, electrical safety, and heavy construction equipment.	Pass/Fail
Emergency Preparedness and Response	Demonstrate appropriate emergency preparedness and response arrangements for construction activities, including fire, flooding, blasting incidents, medical emergencies, and rescue operations.	Pass/Fail
Labour and Working Conditions	Demonstrate the capability to manage labour, working conditions, worker welfare, accommodation, grievance management, and compliance with applicable labour laws and Contract requirements.	Pass/Fail
Community Health and Safety	Demonstrate the capability to manage risks to neighbouring communities arising from construction activities, traffic management, public access, noise, vibration, and other project-related activities.	Pass/Fail
ESHS Compliance	Demonstrate compliance with the ESHS requirements specified in the Bidding Documents and the applicable laws and regulations of the Kingdom of Bhutan.	Pass/Fail

Notes:

- The ESHS capability requirements represent the minimum requirements for qualification and do not replace the detailed ESHS obligations specified in the Contract.*
- Compliance with the qualification requirements shall not relieve the successful Bidder of its obligations to prepare and implement the ESHS plans required under the Contract.*
- The Employer reserves the right to verify the Bidder's ESHS performance and management systems in accordance with Section 6 of this Section 4 document.*

4.8.2 Documentary Evidence

The Bidder shall submit documentary evidence demonstrating compliance with the ESHS capability requirements specified in Table 4.8.

The documentary evidence shall include, as applicable:

- Environmental, Social, Health and Safety (ESHS) policy approved by the Bidder's senior management;
- documentation describing the Bidder's ESHS Management System and organisational structure;
- organisation chart identifying personnel responsible for ESHS management;
- details of ESHS performance on comparable projects undertaken during the last five (5) years, including information on reportable incidents, lost time injuries, fatalities, regulatory actions, and significant environmental or social incidents, where applicable;
- details of any recognised ESHS management system certifications held by the Bidder, where applicable;
- examples of environmental, occupational health and safety, labour management, stakeholder engagement, or community management procedures implemented on comparable projects; and
- any other documentary evidence specified in the Bidding Documents.



Where the Bidder has been subject to regulatory enforcement actions, significant contractual sanctions, or serious ESHS incidents, the Bidder shall provide details of the incident together with the corrective actions implemented.

5 JOINT VENTURES AND SPECIALIST SUBCONTRACTORS

5.1 Joint Venture Requirements

A Bid may be submitted by either a Single Entity or a Joint Venture, whether existing or intended.

Where a Bid is submitted by a Joint Venture, all members shall be jointly and severally liable for the execution and performance of the Contract.

The Joint Venture shall designate one member as the Lead Member, who shall be authorised to represent and bind all Joint Venture members in all matters relating to the Bid and, if awarded the Contract, the execution of the Contract.

The Joint Venture shall comprise a maximum of two (2) members, including the Lead Member.

Unless otherwise specified in the Bidding Documents or the Bid Data Sheet:

- i) each Joint Venture member shall independently satisfy the eligibility requirements specified in Section 4.1;
- ii) the Joint Venture shall collectively satisfy the financial capacity requirements specified in Section 4.2;
- iii) the Joint Venture shall collectively satisfy the general construction experience requirements specified in Section 4.3;
- iv) the Joint Venture shall collectively satisfy the specific project experience requirements specified in Section 4.4;
- v) the proposed Key Personnel, Construction Plant and Equipment, Construction Methodology and Construction Programme, and ESHS capability shall collectively satisfy the requirements specified in Sections 4.5 to 4.8;
- vi) each Joint Venture member shall undertake the portion of the Works for which it has demonstrated the required qualifications, experience, and capability; and
- vii) the Lead Member shall satisfy the minimum participation requirements specified in the Bid Data Sheet.

5.2 Specialist Subcontractors

Where permitted under the Bidding Documents, the Bidder may engage Specialist Subcontractors to undertake specialised portions of the Works.

The Bidder shall identify each proposed Specialist Subcontractor and clearly define the scope of work proposed to be subcontracted.

Where the Bidder relies upon the qualifications or experience of a Specialist Subcontractor to satisfy a qualification requirement, such qualifications or experience shall be considered only where expressly permitted under the Bidding Documents.

The engagement of a Specialist Subcontractor shall not relieve the Bidder or, where applicable, the Joint Venture, of any obligation, responsibility, or liability under the Contract.

The Bidder shall remain fully responsible for the execution and performance of all Works, including those undertaken by Specialist Subcontractors.

5.3 Changes in Composition

Following the Bid Submission Deadline, the composition of a Joint Venture or the proposed Specialist Subcontractors shall not be changed without the prior written approval of the Employer.

The Employer may reject any proposed change where it:



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- i) materially affects the qualifications of the Bidder;
- ii) results in non-compliance with the qualification requirements specified in the Bidding Documents;
- iii) adversely affects the Bidder's technical capability, financial capacity, or organisational capability; or
- iv) is otherwise inconsistent with the requirements of the procurement process.

5.4 Multiple Participation

A firm shall submit only one Bid for the Contract, either as a Single Entity or as a member of one Joint Venture.

A firm that submits, or participates in, more than one Bid for the Contract may result in the rejection of all Bids in which that firm has participated, unless such participation is expressly permitted under the Bidding Documents.

This restriction shall not preclude a firm from participating as a Specialist Subcontractor in one or more Bids, provided that:

- i) such participation is permitted under the Bidding Documents;
- ii) the firm does not participate as a Bidder or Joint Venture member for the same Contract; and
- iii) such participation does not give rise to a conflict of interest or otherwise compromise the fairness, transparency, or integrity of the procurement process.

5.5 Documentary Evidence

Where a Bid is submitted by a Joint Venture, the Bidder shall submit, as applicable:

- i) the Joint Venture Agreement, or a Letter of Intent to enter into a Joint Venture upon Contract Award;
- ii) a Power of Attorney authorising the Lead Member to represent and bind all Joint Venture members;
- iii) documentary evidence demonstrating that each Joint Venture member satisfies the applicable qualification requirements;
- iv) a statement identifying the responsibilities and proposed scope of work of each Joint Venture member;
- v) details of each proposed Specialist Subcontractor, including the scope of work to be subcontracted; and
- vi) any other documentary evidence specified in the Bidding Documents.

6 CLARIFICATIONS, VERIFICATION AND EMPLOYER'S RIGHTS

6.1 Clarifications

To facilitate the evaluation of Bids, the Employer may request a Bidder to clarify information or documentary evidence submitted as part of its Bid.

Any clarification requested by the Employer shall be limited to explaining or confirming information already contained in the Bid and shall not permit the Bidder to:

- i) modify or revise its Bid;
- ii) submit information that materially enhances its qualifications;
- iii) rectify any material omission or deficiency;
- iv) alter the substance of its Bid; or
- v) obtain any unfair competitive advantage.

Any clarification submitted by the Bidder shall form part of the Bid solely for the purpose of evaluation.

Failure of the Bidder to respond to a request for clarification within the period specified by the Employer may result in the Bid being determined Non-Responsive or the Bidder being determined Not Qualified, as applicable.

6.2 Verification and Due Diligence

The Employer reserves the right, at any stage of the procurement process, to verify any information, declaration, certificate, or documentary evidence submitted by the Bidder.

For this purpose, the Employer may:



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- i) contact previous Employers, Clients, consultants, financial institutions, government agencies, manufacturers, suppliers, or other relevant organisations;
- ii) verify project references, completion certificates, and performance records;
- iii) verify the qualifications, experience, and availability of proposed Key Personnel;
- iv) verify the ownership, availability, and technical capacity of the proposed Construction Plant and Equipment;
- v) conduct site visits to completed or ongoing projects; and
- vi) undertake any other due diligence considered necessary to confirm the Bidder's qualifications.

The Bidder shall provide all reasonable assistance and information required to facilitate such verification.

6.3 Misrepresentation

The Employer may determine a Bidder to be Not Qualified where it establishes that the Bidder has:

- i) submitted false, misleading, inaccurate, or materially incomplete information;
- ii) concealed information relevant to the evaluation;
- iii) submitted forged, altered, or fraudulent documents;
- iv) materially misrepresented its qualifications, financial capacity, technical capability, resources, or experience; or
- v) engaged in fraudulent, corrupt, collusive, coercive, or obstructive practices in connection with the procurement process.

Without prejudice to any other rights or remedies available under the Bidding Documents or applicable law, the Employer may reject the Bid and take any further action permitted under the applicable procurement framework.

6.4 Employer's Rights

The Employer reserves the right, at any stage of the procurement process, to:

- i) seek clarification from any Bidder;
- ii) verify any information submitted by a Bidder;
- iii) undertake due diligence in respect of any Bidder;
- iv) determine whether a Bidder satisfies the qualification requirements;
- v) reject any non-compliant Bid;
- vi) discontinue the evaluation of any Bid found to be materially non-compliant; and
- vii) reject any Bid or all Bids and annul or cancel the procurement process in accordance with the applicable procurement framework.

The exercise of any such right shall not give rise to any claim, compensation, or liability against the Employer, except as expressly provided under the applicable law or the Bidding Documents.

6.5 Confidentiality

Information relating to the evaluation of Bids shall be treated as confidential and shall not be disclosed to any person not officially concerned with the evaluation process, except where disclosure is required under applicable law or the Bidding Documents.

No Bidder shall contact the Employer regarding the evaluation of its Bid except in response to a request for clarification issued by the Employer.

Any attempt by a Bidder to influence the evaluation process may result in the rejection of its Bid.

7 STAGE 2 – FINANCIAL EVALUATION AND CONTRACT AWARD

Only Bidders determined to be Qualified under Stage 1 shall be eligible to participate in Stage 2.

Stage 2 comprises the Financial Evaluation and Contract Award process. Depending on the procurement approach adopted by the Employer, the Financial Evaluation shall be undertaken using either:



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- i) Competitive Financial Bidding; or
- ii) Direct Commercial Negotiation.

The Employer shall determine the applicable Stage 2 approach for each Contract Package prior to commencement of Stage 2, and the selected approach shall apply throughout the procurement of that Contract Package.

7.1 Competitive Financial Bidding

Where the Competitive Financial Bidding approach is adopted, Qualified Bidders shall be invited to submit Financial Bids based on the final Employer's Requirements, Conditions of Contract, and Bills of Quantities.

The Employer shall evaluate the Financial Bids in accordance with the methodology specified in the Stage 2 Bidding Documents. The Financial Evaluation may include, as applicable:

- i) correction of arithmetic errors;
- ii) application of unconditional discounts;
- iii) conversion of bid prices to a common currency, where applicable;
- iv) application of evaluation adjustments specified in the Bidding Documents; and
- v) verification of the Bidder's continued compliance with the qualification requirements.

Following the Financial Evaluation, the Employer may negotiate with the Bidder determined to have submitted the Lowest Evaluated Responsive Bid or the Most Advantageous Bid, as applicable, with the objective of reaching agreement on a fair, reasonable, and commercially acceptable Contract Price and associated commercial terms.

For this purpose, the Employer may require the Bidder to provide cost breakdowns and supporting information, including unit rates, resource inputs, productivity assumptions, overheads, and profit, necessary to substantiate the reasonableness of the Bid Price.

Negotiations shall not materially alter the scope of the Works, the fundamental requirements of the Bidding Documents, or the basis upon which the Financial Bids were evaluated.

7.2 Direct Commercial Negotiation

Where the Direct Commercial Negotiation approach is adopted, the Employer may invite one or more technically qualified Bidders to participate in commercial negotiations without conducting a competitive Financial Bid process.

The negotiations shall be based on benchmark or reference Bills of Quantities (BOQ) rates established by the Employer using comparable hydropower projects, prevailing market rates, independent cost estimates, and other relevant commercial information.

The objective of the negotiations shall be to achieve a fair, reasonable, and commercially acceptable Contract Price while ensuring value for money, equitable allocation of contractual risks, and timely implementation of the Project.

The Employer may require the Bidder to provide detailed cost breakdowns, supporting calculations, quotations, productivity assumptions, and other information necessary to substantiate the proposed rates and prices.

Where the Employer and the Bidder fail to reach a mutually acceptable outcome, the Employer may discontinue the negotiations and proceed in accordance with the approved Contract Award Strategy and the Bidding Documents.

Participation in Direct Commercial Negotiation shall not create any entitlement to Contract Award.

7.3 Contract Award



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Following completion of the applicable Stage 2 Financial Evaluation process, the Employer shall verify that the preferred Bidder continues to satisfy the Stage 1 qualification requirements.

The recommendation for Contract Award shall be supported by:

- i) the outcome of the Financial Evaluation or commercial negotiations, as applicable;
- ii) confirmation of the Bidder's continued qualification;
- iii) confirmation that the Contract Price is fair, reasonable, and represents value for money; and
- iv) confirmation that the proposed award complies with the Bidding Documents and the applicable approval requirements.

7.4 Limitation on Award

To promote balanced allocation of resources, reduce execution risk, and facilitate timely implementation of the Project, the Employer may limit the award to a maximum of two of the three Main Civil Works Contract Packages to any one contractor.

Where the same Bidder is identified as the preferred Bidder for all three Contract Packages under the Competitive Financial Bidding approach, the Employer may award a maximum of two Contract Packages to that Bidder. The remaining Contract Package may be awarded to the next ranked Qualified Bidder, provided the Bidder agrees to execute the Contract at the established Lowest Evaluated Bid Price.

Where the Direct Commercial Negotiation approach is adopted, the Employer may similarly allocate Contract Packages among technically qualified Bidders through separate commercial negotiations, taking into consideration contractor capacity, project implementation schedule, execution risk, and value for money.

7.5 Reservation of Rights

Notwithstanding any provision contained in this Section, the Employer reserves the right, at any time prior to Contract Award, to:

- i) determine the Stage 2 procurement approach to be adopted for any Contract Package;
- ii) conduct Competitive Financial Bidding or Direct Commercial Negotiation, as applicable;
- iii) negotiate with the Bidder determined to have submitted the Lowest Evaluated Responsive Bid or the Most Advantageous Bid under the Competitive Financial Bidding approach, or with one or more technically qualified Bidders under the Direct Commercial Negotiation approach, as applicable;
- iv) discontinue, suspend, or terminate negotiations where a fair, reasonable, and commercially acceptable outcome cannot be achieved;
- v) reject any or all Bids, cancel the procurement process, or abandon the procurement of any Contract Package, in accordance with the Bidding Documents and applicable laws and regulations;
- vi) verify the continued qualification and capability of any Bidder prior to Contract Award;
- vii) limit the number of Contract Packages awarded to a single contractor; and
- viii) take any other action necessary to protect the interests of the Employer and ensure transparency, fairness, value for money, and successful implementation of the Project.

Nothing contained in this document shall be construed as creating any obligation on the Employer to award a Contract, conclude negotiations, or compensate any Bidder for costs incurred in the preparation or submission of its Bid or participation in the procurement process.



SECTION 5 - EMPLOYER'S REQUIREMENTS/PROJECT INFORMATION

Preliminary Status of Information

This Section provides preliminary Project information to enable Bidders to obtain a comprehensive understanding of the Wangchhu Hydroelectric Project, including the scope and complexity of the Works, principal Project components, site conditions, access and logistics, geological and geotechnical conditions, hydrology, preliminary design parameters, construction facilities, interfaces, construction constraints and other relevant Project characteristics.

The information has been compiled primarily from the Detailed Project Report (DPR) - 2014, together with available geological, geotechnical, hydrological and geophysical investigations and Project information developed subsequently.

The information is provided at Stage 1 Bidding Process to assist Bidders in preparing comprehensive Qualification and Technical Proposals demonstrating their:

- i) relevant construction experience and technical capability;
- ii) understanding of the scope, complexity and interfaces of the Works;
- iii) proposed Construction Methodology and sequence of construction;
- iv) preliminary Construction Programme and ability to achieve the specified Time for Completion;
- v) proposed Construction Plant and Equipment;
- vi) proposed personnel, organisation and management arrangements;
- vii) approach to geological, geotechnical and construction risks;
- viii) mobilisation, logistics, access, temporary facilities and construction power arrangements;
- ix) quality management arrangements;
- x) Environmental, Social, Health and Safety (ESHS) capability; and
- xi) overall capacity to execute the relevant Contract Package.

The technical information, dimensions, quantities, design parameters, geological and geotechnical information, hydrological data and other Project information presented herein represent the information presently available to the Employer. Where information contained in the DPR-2014 has subsequently been updated through further investigations, detailed engineering, approved drawings or separately awarded Works, the latest available Project information shall take precedence.

The information provided at Stage 1 Bidding Process is preliminary in nature and may be updated, supplemented or refined as detailed engineering progresses.

Preliminary drawings, reference documents, applicable design criteria, codes and standards, where relevant, shall be provided separately as part of the Bidding Documents or associated reference information.

Only Bidders determined to be Qualified following completion of Stage 1 Bidding Process shall be eligible to proceed to the subsequent commercial award process. Depending on the Contract Award Approach adopted for the relevant Contract Package, the commercial process may proceed through Stage 2 Competitive Financial Bidding or through Direct Commercial Negotiation in accordance with the approved Contract Award Strategy.

The final Employer's Requirements / Project Information, Technical Specifications, Drawings, Bills of Quantities, Conditions of Contract and other contractual documents applicable to the selected commercial process shall form the basis for pricing or negotiation, Contract Award and subsequent execution of the Works.

Accordingly, the information contained in this Section shall primarily be used for preparation and evaluation of the Stage 1 Qualification and Technical Proposals.

1 Project Description

Wangchhu Hydroelectric Power Limited (WHPL) is implementing the 570 MW Wangchhu Hydroelectric Project, a run-of-river hydropower project being developed as a joint venture between Druk Green Power



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Corporation Limited (DGPC) and Adani Power Limited (APL). The Project is located on the Wangchhu River in Chhukha Dzongkhag, southwestern Bhutan.

The Dam site is located at an elevation of approximately 400 m near Gamana villages, approximately 7.5 km downstream of the Tail Race outfall of the Tala Hydroelectric Project. The Surface Powerhouse is located at an elevation of approximately 180 m near Piping (Jigmechhu) village, approximately 100 m upstream of the confluence of the Wangchhu River with the Jigmechhu River.

The Project is designed to utilise a discharge of approximately 209 m³/s through an approximately 12.26 km long, 8.5 m diameter circular concrete-lined Head Race Tunnel.

The Head Race Tunnel terminates at a restricted-orifice Surge Shaft approximately 20 m in diameter and 146.5 m high. From the Surge Shaft, two steel-lined Pressure Shafts, each approximately 4.8 m in diameter and 852.43 m long, convey water towards the Surface Powerhouse and bifurcate into four unit penstocks of approximately 3.3 m diameter.

The Surface Powerhouse accommodates four vertical-axis Francis turbine-generator units of 142.5 MW each, giving a total installed capacity of 570 MW.

Water discharged from the generating units is conveyed through a common collection chamber and a single trapezoidal Tail Race Channel back to the Wangchhu River.

The annual design energy generation in the 90% dependable year is approximately 2,010.96 GWh. The Project is presently planned for completion within 60 months following award of the Main Civil Works.

The principal Project components comprise:

- i) Concrete Gravity Dam and Spillways;
- ii) River Diversion Works;
- iii) Power Intake Structures;
- iv) Head Race Tunnel and associated adits;
- v) Surge Shaft;
- vi) Valve House;
- vii) Pressure Shafts and Penstocks;
- viii) Surface Powerhouse and associated facilities;
- ix) Transformer Yard and Switchyard;
- x) Tail Race Channel and Outfall;
- xi) associated Hydro-Mechanical Works; and
- xii) Electro-Mechanical Works.

2 Contract Packaging

The Main Civil Works are divided into three separate Contract Packages, each incorporating the associated Hydro-Mechanical Works. The principal Electro-Mechanical Works will be implemented under a separate package.

2.1 WC I – Dam Package

The scope comprises construction of the Concrete Gravity Dam, Spillway, Intake Structures and the initial section of the Head Race Tunnel from Chainage 0+588, together with associated Hydro-Mechanical Works.

The River Diversion Tunnel Works, including associated cofferdams, have been awarded under a separate contract and are excluded from WC I. The WC I Contractor shall, however, coordinate the physical, technical, construction, access and programme interfaces affecting the Dam and associated Works with the River Diversion Tunnel Contractor.

2.2 WC II – HRT Package



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The scope comprises construction of the Head Race Tunnel from Chainage 588 to Chainage 11+225, including associated HRT adits, tunnel excavation, rock support, concrete lining, grouting, drainage, access arrangements and associated Hydro-Mechanical Gates.

2.3 WC III – Powerhouse Package

The scope comprises construction of the Surface Powerhouse, Surge Shaft, Valve House, Pressure Shafts and Penstocks, Transformer Yard, Switchyard, Tail Race Channel and Outfall, and the final section of the HRT from Chainage 11+225 to Chainage 12+260, together with associated Hydro-Mechanical Works.

2.4 WC IV – Electro-Mechanical Package

The scope comprises design, engineering, manufacture, inspection and testing, supply, transportation, storage, erection, testing, commissioning, field acceptance testing, quality assurance and training for the principal Electro-Mechanical equipment and systems.

The Package includes turbine-generator units, Main Inlet Valves, generator transformers, switchyard equipment, cables, control systems, metering, SCADA, protection systems and associated equipment.

3 Climate

The Project lies in the southern foothills of western Bhutan and experiences a humid and subtropical climate.

Summer conditions generally commence around mid-April, followed by pre-monsoon rainfall. The southwest monsoon generally extends from June to late September, with heavy rainfall in the Project area.

Temperatures are generally in the range of approximately 15°C to 30°C, although temperatures of up to approximately 40°C may occur in the lower valleys during summer.

Bidders shall consider the effects of seasonal rainfall, humidity and temperature on access, slope stability, underground excavation, concrete production, material handling, temporary works, construction productivity and the preliminary Construction Programme.

4 Project Location, Access and Logistics

4.1 External Access

The Project is accessible from India through the Siliguri–Hasimara–Phuentsholing corridor and thereafter through the road network in Bhutan.

The Dam site is located approximately 250 km from Siliguri and approximately 92 km from Phuentsholing. The Surface Powerhouse site is located approximately 255 km from Siliguri.

Indicative external access routes and approximate road distances relevant to the Project are as follows:

Route / Location	Approximate Distance (km)
Siliguri – Hasimara – Phuentsholing	160
Phuentsholing – Gedu – Kezari	72
Phuentsholing – Gedu – Piping	93
Phuentsholing – Kolkata	810
Phuentsholing – New Alipurduar	65
Phuentsholing – Gedu	45
Phuentsholing – Bagdogra	170
Manitar – Raidak	35
Raidak – Lhamoizinkha	18



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The nearest broad-gauge railway station is New Alipurduar in India, approximately 65 km from Phuentsholing on the Siliguri–Guwahati railway corridor.

The nearest airports are Paro International Airport in Bhutan and Bagdogra Airport in India, approximately 175 km and 160 km respectively from Phuentsholing.

Bidders shall consider available transport routes, road geometry, bridge capacities, border formalities, seasonal conditions and other logistical constraints when planning transportation of Construction Plant and Equipment, materials and personnel to the Project Site.

4.2 Internal Access Roads and Bridges

Access roads and bridges have been constructed or are under development to provide access to the principal Project construction areas.

The presently identified access arrangements include:

Access	Road Improvement (km)	New Construction (km)	Approximate Total (km)
Dam Site at Gamana	6.90	5.32	12.22
Adit 1 and Adit 2 – Dojangchen Area	9.90	4.61	14.51
Adit 3	9.315	3.44	12.755
Surge Shaft and Surface Powerhouse	2.60	3.93	6.53

A Bailey Bridge of approximately 40 MT capacity is proposed across the Wangchhu River to provide access to the Adit 1 and Adit 2 portals.

A 128-foot Bailey Bridge has been constructed across the Jigmechhu River to provide access to the Surface Powerhouse site and Adit 3. The bridge also restores connectivity to Bayul Kunzang village following the loss of the previous bridge during the October 2025 floods.

The temporary Jigmechhu Bailey Bridge has a rated load capacity of 24 MT. An operational load limit of 18 MT will be maintained during the summer monsoon period.

As part of the permanent Project access infrastructure, WHPL proposes to construct a 70R permanent bridge across the Jigmechhu River. The bridge is intended to provide reliable all-weather access to the Surface Powerhouse area and facilitate transportation of heavy Construction Plant and Equipment and materials.

The status, capacity and operating limitations of individual roads and bridges may change as infrastructure works progress. The latest information made available by the Employer shall take precedence.

Bidders shall consider road geometry, gradients, pavement condition, bridge capacities, seasonal accessibility, likely maintenance requirements and restrictions on movement of heavy or oversized Construction Plant and Equipment when preparing their mobilisation plan, logistics arrangements, Construction Methodology and preliminary Construction Programme.

5 DPR-Level Design and Description of Project Components

The following information describes the principal Project components based on the 2014 DPR together with available subsequent investigations, design development and current Project information.

The Project layout and principal design parameters developed under the 2014 DPR are presently being reviewed and validated by the Employer's Design and Engineering Consultant as part of the detailed design and engineering of the Project. Accordingly, certain layouts, dimensions and design parameters may be optimised or refined as detailed engineering progresses.



The information is provided to enable Bidders to understand the overall Project configuration, technical complexity, current status of design development and physical interfaces relevant to the three Main Civil Works Packages.

5.1 Concrete Gravity Dam and Spillways

A concrete gravity dam has been adopted for the Project.

The Dam is approximately 134 m high, measured from the deepest foundation level, and approximately 295 m long at the crest. It comprises 19 blocks ranging from approximately 15 m to 17.43 m in width.

The Dam crest is at approximately EL 498 m and has a width of approximately 8.0 m, which also serves as a road carriageway.

The Full Reservoir Level is EL 494 m and the Minimum Drawdown Level is EL 484 m. The deepest foundation level is approximately EL 364 m.

The Dam foundation comprises predominantly hard and compact quartzite having reported compressive strength in the range of approximately 164–172 MPa.

During preparation of the 2014 DPR, five alternative Dam locations were examined. Dam Axis C–C was selected as the preferred location based principally on favourable foundation rock conditions, absence of major nearby gullies and suitability for the Dam and Power Intake arrangement.

The selected Dam axis is presently being reviewed and validated as part of detailed engineering. Since the River Diversion Tunnel alignment has subsequently been finalised and the Diversion Tunnel Works have already been awarded, the potential for any major relocation of the Dam axis is limited. The detailed Dam arrangement may, however, be further optimised to address construction considerations including the extent of riverbed excavation and substantial abutment cutting anticipated on both banks.

The Dam incorporates seven low-level radial sluice gates, each approximately 7.8 m wide × 9.10 m high, and a central Surface Spillway approximately 6.0 m wide × 4.0 m high.

The associated Works include foundation and abutment excavation and treatment, galleries, drainage, consolidation and curtain grouting, spillway structures, plunge pool and downstream protection works.

Bidders shall take into consideration the scale of foundation excavation, abutment cutting, slope stabilisation, foundation treatment, high-volume concrete production and the interface with the separately awarded River Diversion Works when preparing their Stage 1 Technical Proposals.

The reservoir has a gross storage capacity of approximately 53.60 million cubic meters (MCM) at FRL and a live storage capacity of approximately 14.50 MCM between FRL and MDDL.

The reservoir extends approximately 7.5 km upstream of the Dam axis and has an estimated surface area of approximately 159.65 hectares at FRL.

The available live storage provides approximately 4.02 hours of daily peaking generation.

5.2 River Diversion Works

The River Diversion system comprises two approximately 10 m diameter horseshoe-shaped diversion tunnels, DT-1 and DT-2, located on the right bank.

Based on subsequently developed Project information:

- i) DT-1 is an ungated diversion tunnel approximately 460 m long;
- ii) DT-2 is a gated diversion tunnel approximately 545 m long;
- iii) DT-1 inlet invert is approximately EL 414 m;



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- iv) DT-2 inlet invert is approximately EL 407 m; and
- v) The tunnel outlet invert is approximately EL 403 m.

DT-2 incorporates two intake gates, each approximately 5.0 m wide × 10.0 m high.

A construction adit approximately 151.644 m long and 7.0 m in diameter has been provided to facilitate the execution of the River Diversion Works.

The diversion arrangement includes an upstream cofferdam with crest approximately at EL 431 m and a downstream cofferdam with crest approximately at EL 410 m.

The River Diversion Works have been awarded separately. Their principal relevance to the Main Civil Works bidding process is the construction, access, programme and physical interface with WC I.

5.3 Power Intake

The Power Intake comprises two straight-type intakes fitted with inclined trash racks, located on the left bank approximately 40 m upstream of the Dam axis.

The intake invert is at approximately EL 470 m. The trash rack bottom is at approximately EL 464.6 m, with the trash racks extending up to FRL EL 494 m. Piers and gate grooves extend up to approximately EL 498 m.

The DPR geological investigations identified extensive massive quartzite formations along the left bank in the vicinity of the Dam axis. These conditions formed an important consideration in locating the Power Intake and the initial alignment of the Head Race Tunnel on the left bank.

The Intake Works include associated gates, bulkhead arrangements, trash racks, embedded parts, lifting equipment and associated Civil and Hydro-Mechanical Works.

The final arrangement of the Power Intake will be confirmed through detailed engineering based on the available geological, topographical and hydraulic information.

5.4 Head Race Tunnel

The Head Race Tunnel is approximately 12.26 km long and 8.5 m in finished diameter, circular in section and concrete-lined.

The HRT follows the left bank of the Wangchhu River and conveys a design discharge of approximately 209 m³/s.

The water-conductor alignment is presently being reviewed as part of detailed engineering based on the geological mapping, exploratory investigations and other subsurface information available from the DPR and subsequent studies. Additional investigations may be undertaken where required to confirm geological conditions and optimise the final alignment.

Construction is envisaged through multiple working faces using intermediate construction adits.

The Works include tunnel excavation, rock support, concrete lining, consolidation and contact grouting, drainage, temporary services, ventilation, dewatering and associated underground construction facilities.

Bidders shall recognise that the detailed tunnel alignment, support requirements and local construction conditions may be further refined as the detailed design and additional site investigations progress.

5.5 Surge Shaft

A restricted-orifice Surge Shaft, open to the sky, is provided near the downstream end of the HRT.



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The Surge Shaft is approximately 20 m in diameter and 146.5 m high, with its top at approximately EL 559 m and bottom at approximately EL 412.50 m.

Hydraulic studies indicate a maximum upsurge level of approximately EL 531.00 m and a maximum downsurge level of approximately EL 431.00 m.

The DPR envisaged excavation by raise-boring followed by slashing, with mucking access through Adit 5 and rock support comprising rock bolts, shotcrete, wire mesh and consolidation grouting where required.

5.6 Pressure Shafts

The Project comprises two steel-lined Pressure Shafts, each approximately 4.8 m in diameter and approximately 852.43 m long.

Each Pressure Shaft conveys approximately 104.50 m³/s and bifurcates near the Surface Powerhouse into two unit penstocks approximately 3.3 m in diameter.

The Pressure Shaft arrangement includes horizontal and vertical reaches and requires significant underground excavation, rock support, steel lining, welding, grouting and associated quality-control requirements.

5.7 Valve House

An underground Valve House cavern approximately 60.65 m long × 14 m wide × 21.15 m high accommodates two approximately 4,800 mm diameter butterfly valves.

The Valve House is located in the upper horizontal reach of the Pressure Shafts downstream of the Surge Shaft.

The floor is at approximately EL 400.10 m and the cavern crown at approximately EL 421.25 m.

Rock support envisaged in the DPR includes rock bolts, steel-fibre-reinforced shotcrete and, where required, steel ribs or lattice girders and consolidation grouting.

5.8 Surface Powerhouse

The Surface Powerhouse is located on the left bank of the Wangchhu River immediately upstream of its confluence with the Jigmechhu River.

The Machine Hall is approximately 124 m long × 21.5 m wide × 44.5 m high and accommodates four vertical-axis Francis turbine-generator units of 142.5 MW each, spaced approximately 21 m centre-to-centre.

The principal operating levels include:

- i) Control Bay – EL 186.00 m;
- ii) Machine Hall Floor – EL 179.00 m;
- iii) Generator Floor – EL 173.50 m;
- iv) Turbine Floor – EL 168.00 m;
- v) Turbine Centre Line – EL 165.00 m;
- vi) Main Inlet Valve Floor – EL 161.00 m; and
- vii) Drainage and Dewatering Gallery – EL 155.50 m.

The Service Bay is approximately 32 m long and is served by two EOT cranes of approximately 200 T/40 T capacity.

The adjoining Transformer Yard is presently approximately 114 m long × 23 m wide.

The 2014 DPR adopted a Surface Powerhouse at the presently identified location. The suitability of the Powerhouse location is being revalidated during detailed engineering with particular attention to geological conditions, the extent of deep excavation, slope stability, access requirements and the temporary and permanent stabilisation measures required to ensure safe construction and long-term operation.



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A major relocation of the presently proposed Surface Powerhouse is not envisaged at this stage; however, the detailed layout arrangement, excavation profile, slope stabilisation measures and associated structures may be optimised as detailed engineering progresses.

5.9 Tail Race Channel

Water discharged from the generating units is collected in a common collection chamber or outfall pool near the draft tube gates.

A single trapezoidal Tail Race Channel conveys the water back to the Wangchhu River.

6 Principal Project, Hydraulic and Seismic Parameters

6.1 Principal Project and Hydraulic Parameters

The principal Project and hydraulic parameters presently available are summarised below:

Parameter	Value
Installed Capacity	570 MW
Generating Units	4 × 142.5 MW
Design Discharge	Approximately 209 m ³ /s
Full Reservoir Level	EL 494.00 m
Minimum Drawdown Level	EL 484.00 m
Dam Crest Level	EL 498.00 m
Gross Reservoir Storage	53.60 MCM
Live Reservoir Storage	14.50 MCM
Design Net Head	Approximately 300 m
Annual Generation – 90% Dependable Year	2,010.96 GWh
Probable Maximum Flood	11,441 m ³ /s
Diversion Design Discharge	2,157 m ³ /s
GLOF Discharge adopted in DPR studies	1,741 m ³ /s
Approximate GLOF Travel Time to Project Site	4 hours 2 minutes

The above parameters represent the currently available Project design basis. The hydrological, flood, GLOF, and sedimentation studies are being reviewed as part of the ongoing detailed design and engineering assignment, and the final adopted values may be confirmed or refined based on the outcome of these reviews.

6.2 Seismic Design Parameters

As part of the 2014 DPR, site-specific seismic design parameters were developed for the Project based on regional tectonic and seismicity information and available local geotechnical characteristics using deterministic and probabilistic seismic hazard assessments.

The deterministic assessment was governed by a Maximum Credible Earthquake (MCE) of magnitude 8.0, associated with the Main Boundary Thrust at an approximate closest distance of 29 km. Probabilistic assessments considered seismicity associated with the identified regional seismic source zones.

The envelope of the deterministic and probabilistic response spectra was adopted as the target response spectrum for development of the DPR seismic design parameters.

The principal seismic parameters recommended in the DPR are summarised below:

Parameter	Value
Controlling MCE Magnitude	8.0
Approximate closest distance to governing source	29 km



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Parameter	Value
Horizontal Peak Ground Acceleration – MCE	0.463 g
Vertical Peak Ground Acceleration – MCE	0.273 g
Horizontal Peak Ground Acceleration – DBE	0.214 g
Vertical Peak Ground Acceleration – DBE	0.118 g
Horizontal Design Seismic Coefficient for Dam Stability	0.249 g
Vertical Design Seismic Coefficient for Dam Stability	0.166 g

The DPR horizontal design seismic coefficient for the Dam was determined using the spectral response corresponding to the estimated natural period of the Dam and a damping ratio appropriate for concrete/masonry dams.

As part of the current detailed design and engineering assignment, the Design and Engineering Consultant is required to review and reaffirm the site-specific seismic design parameters through a dedicated seismic assessment.

The review will consider the latest available seismic, tectonic, and geotechnical information, and applicable requirements, including relevant ICOLD recommendations and the Bhutan Guidelines for Development of Hydropower Projects, 2018, as revised in 2024.

Accordingly, the above parameters represent the presently available design basis and may be confirmed or refined during detailed engineering.

7 Geological and Geotechnical Information

7.1 General

Geological mapping of the Project area has been undertaken at scales ranging from approximately 1:10,000 to 1:5,000, with detailed mapping at approximately 1:1,000 scale at the Dam and Surface Powerhouse areas and their appurtenant structures.

The investigations include geological mapping, exploratory drilling, exploratory drifts, water-percolation tests, rock mechanics testing, petrographic studies, photo-geological studies and geophysical investigations.

The geological and geotechnical information is provided to enable Bidders to understand the anticipated ground conditions and to demonstrate appropriate experience, construction methodology, equipment, resources, support systems and risk-management measures for the relevant Contract Package.

7.2 Regional Geology

The Dam, River Diversion Works, reservoir area and approximately 60% of the HRT are predominantly located within the Shumar Formation.

The remaining approximately 40% of the HRT, together with the Surge Shaft, Pressure Shafts, Surface Powerhouse and Tail Race Channel, is predominantly located within the Buxa Group.

The HRT crosses the Shumar Thrust separating the two principal geological formations.

7.3 Dam and Intake Area

The Dam site has been geologically mapped over an area of approximately 0.65 km² at approximately 1:1,000 scale.

The Dam site is underlain predominantly by quartzite and phyllitic quartzite with mica-schist interbands. The rock mass is generally jointed and foliated with widespread quartz veins.



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Approximately 15 exploratory drill holes totalling about 1,150 m were undertaken covering the Dam axis, Dam body, bucket section, plunge pool, upstream cofferdam and Diversion Tunnel outlet areas.

Water-percolation testing generally indicated permeability values in the range of approximately 8–17 Lugeons.

Four exploratory drifts were excavated in the Dam abutments to assess rock conditions and stripping limits.

Additional investigations included rock mechanics and petrographic testing, seismic refraction surveys and photo-geological studies.

The Power Intake area is characterised by jointed rock conditions requiring appropriate consideration of excavation sequencing, slope stability and support.

7.4 River Diversion Works

The Diversion Tunnel alignment is predominantly within slightly weathered and blocky quartzite.

The inlet area generally comprises a steep exposed rock face, while significant overburden has been identified in portions of the outlet portal area.

Potential groundwater seepage may occur, particularly near drainage features and structural zones.

The Diversion Tunnel outlet area was investigated through exploratory drilling. Additional geophysical investigations were carried out over the Diversion Tunnel inlet and outlet areas in June 2026 to further refine the geological understanding for design optimisation.

7.5 Head Race Tunnel

The HRT is underlain by rocks of the Shumar Formation and Buxa Group separated by the Shumar Thrust.

Three exploratory drill holes were undertaken at selected drainage and structural crossings, including the Zilung Nallah and Nunpani Fault areas.

Rock mechanics testing and photo-geological studies have also been undertaken.

Tunnelling conditions are expected to vary from Good to Very Poor, with potential groundwater seepage and weak zones associated with drainage crossings, faults and other structural features.

The anticipated rock mass classification along the HRT is:

Rock Class	Approximate Length (m)	Percentage
Class II	1,642.84	13.4%
Class III	5,958.36	48.6%
Class IV	2,819.80	23%
Class V	1,593.80	13%
No Class	245.20	2%
Total	12,260.00	100%

The above distribution is indicative and is based on the presently available geological investigations.

The Bidder shall demonstrate appropriate tunnelling experience, excavation and support methodology, equipment deployment, ventilation and dewatering arrangements, geological mapping and monitoring, and procedures for responding to changes in ground conditions.

7.6 Surge Shaft, Pressure Shafts and Surface Powerhouse



The Powerhouse Complex has been geologically mapped at approximately 1:1,000 scale and is underlain principally by quartzite, phyllite and dolomite, with locally fractured, shattered and sheared rock conditions.

Investigations comprised approximately 16 exploratory drill holes totalling approximately 913.49 m, including:

- i) one drill hole along the Surge Shaft;
- ii) four drill holes along the Pressure Shaft/Penstock alignment;
- iii) ten drill holes at the Surface Powerhouse site; and
- iv) one drill hole along the Tail Race Channel.

Rock mechanics testing, petrographic testing and seismic refraction surveys have also been undertaken.

The geological conditions indicate the need for careful consideration of deep excavation, excavation sequencing, slope stabilisation, underground support, groundwater management, shaft excavation, foundation treatment and associated construction risks.

8 Hydrology and Sedimentation

8.1 General

The Wangchhu River originates from the Jomolhari glacier region and is formed by the confluence of three major snow-fed streams, namely Parochhu, Thimphuchhu and Hachhu.

The catchment area at the Project headworks is approximately 4,147 km².

The Project hydrological studies cover water availability, design flood, diversion flood, Glacial Lake Outburst Flood, sedimentation and associated reservoir-operating considerations.

8.2 Water Availability

During preparation of the 2014 DPR, observed discharge data from the Tala Gauging and Discharge sites for the period 1962–63 to 1998–99, representing approximately 37 years of record, were utilised for development of the Project flow series.

The Tala discharge data were transposed to the Wangchhu Dam site using rainfall variability correction factors and catchment-area proportions.

Discharge data for the period 1999–2000 to 2007–08 were not used in the DPR flow series due to observed inconsistencies in the available records.

An updated water-availability study was subsequently undertaken in 2025 using observed flow data from the Chhukha Hydropower Project for the period 1976–2024.

The Chhukha Hydropower Project catchment area is approximately 3,556 km², compared with approximately 4,147 km² at the Wangchhu Dam site. The flow series was therefore transposed to the Wangchhu Dam site using a catchment-area ratio of approximately 1.17.

To account for the additional catchment between the two sites, rainfall-runoff assessments were also undertaken using the Thiessen Polygon Method.

The average annual rainfall adopted in the 2025 study was approximately:

- i) 1,181 mm over the Chhukha Hydropower Project catchment, based on 11 meteorological stations; and
- ii) 1,373 mm over the Wangchhu catchment, based on 13 meteorological stations.

The 2025 study accordingly enhanced the Chhukha flow series using both the catchment-area difference and rainfall-runoff relationship to derive an updated flow series for the Wangchhu Dam site for the period 1976–2024.



Consistency testing undertaken as part of the 2025 study indicated that the 1976–2024 dataset is generally more consistent and was recommended for use in extending the Project flow series.

As part of the current detailed design and engineering assignment, the Design and Engineering Consultant is reviewing both the 2014 DPR water-availability study and the updated 2025 study to confirm the discharge series to be adopted for energy assessment and final Project design.

Accordingly, the available hydrological information represents the presently available basis and may be refined following completion of the current review.

8.3 Design Flood

The Probable Maximum Flood for the Project was assessed using a hydrometeorological approach.

For the DPR flood study, the overall catchment was divided into two principal sub-catchments:

- i) SB-1, corresponding generally to the Bunakha HEP catchment; and
- ii) SB-2, comprising the intermediate catchment between Bunakha HEP and the Wangchhu Project.

A quasi-distributed hydrological model was developed using HEC-HMS. The flood hydrograph from SB-1 was routed through the intervening river reach and combined with the flood hydrograph generated from SB-2 to derive the PMF hydrograph at the Wangchhu Project.

The resulting Probable Maximum Flood was estimated at approximately 11,441 m³/s and was adopted as the Project design flood.

Flood-frequency analysis was also undertaken using the available annual peak discharge record from the Piping Gauging and Discharge site for the period 1994–2009.

The recorded peak discharges were increased by approximately 15% to account for instantaneous peak flows and were transposed to the proposed Dam site using catchment-area ratios.

The available data were subjected to statistical checks including randomness, stationarity and outlier tests, and the Gumbel Extreme Value distribution was adopted for the frequency analysis.

As part of the current detailed design and engineering assignment, the available hydrological data and flood studies are being reviewed to verify the adequacy of the adopted design flood and its suitability for the final design.

8.4 Diversion Flood

The diversion flood was assessed using non-monsoon peak flows recorded at the Piping Gauging and Discharge site for the period 1994–2009.

A diversion discharge of approximately 2,157 m³/s corresponding to a 25-year return period was adopted for construction planning.

The diversion-flood assessment forms part of the overall hydrological review currently being undertaken for detailed design.

8.5 Glacial Lake Outburst Flood

A GLOF simulation study was undertaken during preparation of the 2014 DPR using MIKE 11.

The study identified approximately 221 lakes within three principal sub-basins of the Wangchhu basin, comprising:

- i) approximately 53 lakes in the Hachhu sub-basin;
- ii) approximately 94 lakes in the Pachhu sub-basin, with a cumulative lake area of approximately 1.82 km²; and
- iii) approximately 74 lakes in the Thimphuchhu sub-basin, with a cumulative lake area of approximately 2.82



The simulations considered GLOF propagation under different initial river-flow conditions, including average annual flood and 100-year return-period flood conditions.

A GLOF discharge of approximately 1,741 m³/s was adopted for the Project.

The estimated travel time of the GLOF wave from the source lake to the Project site was approximately 4 hours and 2 minutes.

As part of the current detailed engineering assignment, the available GLOF study and adopted parameters are being reviewed based on the available Project documentation. The review is intended to verify the reasonableness of the adopted assumptions and GLOF discharge for use in final design.

8.6 Sedimentation

Sedimentation studies were undertaken during preparation of the 2014 DPR to assess long-term reservoir sediment behaviour and its implications for Project operation.

The DPR referred to available sediment information from gauging locations within the Wangchhu basin. An observed sedimentation rate of approximately 0.10 mm/year was considered low compared with similar regional projects, and a sedimentation rate of approximately 1.0 mm/year was adopted for the DPR study.

Based on the adopted sedimentation assumptions, the DPR assessed the progressive development of reservoir sediment levels over the Project operating life.

The DPR also records that mathematical modelling studies were undertaken by IIT Roorkee and, based on those assessments, a separate desilting chamber was not considered necessary. Detailed documentation of the modelling assumptions and results is, however, limited in the available DPR information.

As part of the current detailed design and engineering assignment, the adopted sediment load and sedimentation assumptions are being reviewed using available sediment data from the Wangchhu basin and other relevant river basins in Bhutan.

The review will include assessment of the adequacy of the previously adopted sediment characteristics and the effectiveness of the proposed sediment-management approach.

The requirement for a desilting facility and the previously proposed sediment-management arrangements will be reassessed through numerical modelling of reservoir sedimentation and, where required, further physical model studies.

Based on the outcome of the sedimentation studies, the Project Sediment Management Policy and associated operating measures may be reviewed and refined, and a comprehensive Sediment Management Plan will be developed for the Project.

Bidders shall recognise that sediment-management requirements may influence the final arrangement and operating requirements of the Dam, low-level sluices, Power Intake and associated Hydro-Mechanical Works.

9 Construction Power and Utilities

The maximum overall construction power demand for the Project is presently estimated at approximately 10 MVA.

The Employer proposes to make grid power available at 33 kV at designated supply points near the principal construction areas, including the Dam, HRT Adits, Surge Shaft, Valve House, Pressure Shafts and Surface Powerhouse.

The presently proposed distribution transformer arrangements are summarised below:



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SN	Project Component	Proposed Location	Transformer Capacity
1	Dam and Diversion Tunnel	Near the work area	3 × 1,250 kVA
2	Adit 1	Near the Portal	1 × 750 kVA
3	Adit 2	Near the Portal	1 × 750 kVA
4	Adit 3	Near the Portal	1 × 750 kVA
5	Adit 4	Near the Portal	1 × 750 kVA
6	Adit 5 – Surge Shaft and BFV Chambers	Near the Portal	1 × 750 kVA
7	Surface Powerhouse and Pressure Shaft	At an appropriate location	2 × 1,250 kVA

Grid power shall be made available at the designated 33 kV supply point. From the designated supply point, the Contractor shall be responsible for all internal power distribution arrangements required for execution of the Works, including transformers, switchgear, cables, protection systems, internal transmission and distribution networks, metering and associated facilities.

The Contractor shall bear all costs associated with its internal power distribution arrangements and consumption of grid power in accordance with the applicable electricity tariff and miscellaneous charges.

The applicable electricity tariff and miscellaneous charges shall be based on the prevailing rates notified by Bhutan Power Corporation Limited (BPC). The prevailing tariff and related charges are available on the BPC website at:

<https://www.bpc.bt/electricity-tariff/>

Where more than one Contractor or Project entity receives power from a common source or common energy meter, separate HT or LV metering shall be installed, where required, for internal allocation and accounting of electricity consumption. Overall billing may be based on the principal HT meter, with electricity consumption, distribution losses and associated charges apportioned among the respective users on an agreed basis.

The Contractor shall make adequate arrangements for standby power to ensure continuity of critical construction activities during interruptions or failure of the grid supply.

For tunnelling and other underground Works, where voltage drop may occur due to the length of the distribution system and distance from the supply point, the Contractor shall provide suitably rated booster transformers, voltage stabilisation equipment, diesel generators or other appropriate arrangements necessary to maintain adequate and reliable power supply at the work fronts.

The Bidder shall take the proposed construction power arrangements into consideration when preparing its Construction Methodology, Plant and Equipment deployment plan, site establishment arrangements and preliminary Construction Programme.

10 Topographical Survey and Project Layout

10.1 Available Topographical Survey Information

During preparation of the 2014 DPR, topographical surveys were undertaken over the Project area to support planning and design of the principal Project components.

The principal survey information included:

- i) an overall Project contour survey at approximately 1:5,000 scale with 5 m contour intervals;
- ii) detailed surveys of the Dam site and Adit areas at a scale of approximately 1:500 scale with 2 m contour intervals; and
- iii) detailed surveys of the Surface Powerhouse and Tail Race Channel areas at a scale of approximately 1:200 with 1 m contour intervals.

The DPR survey works utilised DGPS and Total Station equipment, and major survey control points and benchmarks were established within the Project area.

Subsequent topographical surveys have also been undertaken. The latest available survey information includes:



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- i) overall topographical information with approximately 5 m contour intervals; and
- ii) detailed approximately 1 m contour information at selected Project areas, including Adit portals, access roads, reservoir and Dam area and Surface Powerhouse area.
- iii) survey data in the form of AutoCAD Drawings and CSV files.

The available topographical information is presently being reviewed and validated as part of detailed engineering to assess its adequacy, accuracy and reliability for final design.

Particular attention is being given to areas having significant influence on design and construction, including the reservoir limits, Dam and abutments, Intake, Adit portals, Surge Shaft, Pressure Shafts, Surface Powerhouse and associated access infrastructure.

Where gaps or deficiencies in the existing topographical information are identified, supplementary surveys may be undertaken as required for detailed design.

Bidders shall use the available topographical information to understand the general terrain, access conditions, excavation requirements, slope conditions, work-area constraints and logistics relevant to the respective Contract Package.

10.2 Project Layout

The principal Project layout developed under the 2014 DPR is presently being reviewed and validated through detailed engineering.

The review covers the principal Project components, including:

- i) Concrete Gravity Dam and Spillways;
- ii) Power Intake;
- iii) Head Race Tunnel and Adits;
- iv) Surge Shaft;
- v) Valve House;
- vi) Pressure Shafts;
- vii) Surface Powerhouse;
- viii) Transformer Yard and Switchyard;
- ix) Tail Race Channel;
- x) River Diversion Works; and
- xi) associated access and construction infrastructure.

The 2014 DPR examined five alternative Dam locations and selected Dam Axis C–C as the preferred location. The selected axis is being revalidated taking into account geological conditions, foundation requirements, the established River Diversion Tunnel arrangement, excavation requirements and constructability.

The River Diversion Tunnel alignment has subsequently been finalised and the associated Works have already been awarded. Accordingly, any optimisation of the Dam arrangement is expected to remain generally compatible with the established River Diversion Works.

The principal water-conductor system and Surface Powerhouse are located on the left bank of the Wangchhu River. The final alignment and arrangement of these components will be confirmed through detailed engineering based on available topographical, geological, geotechnical and hydraulic information and any supplementary investigations considered necessary.

The detailed Project Layout may therefore be refined during the course of detailed engineering. Bidders shall take this status of design development into consideration when preparing their Stage 1 Qualification and Technical Proposals.

11 Land and Temporary Construction Facilities

The Employer intends to make available designated Project land required for the Permanent Works and identified areas for temporary construction facilities, subject to the provisions of the Contract.



Land may also be made available for development of temporary infrastructure, job facilities, power supply, communications and other construction-related facilities.

Where additional land beyond the areas made available by the Employer is required for the Contractor's temporary facilities, the Contractor shall make the necessary arrangements at its own cost in accordance with the final Contract requirements.

The Contractor shall develop the temporary infrastructure required for execution of its Works, including residential and labour camps, offices, workshops, stores, water supply, sanitation, internal roads, storage areas, communications, fencing, security and other associated facilities.

Certain Project access roads may be handed over on an "as-is-where-is" basis to facilitate commencement of mobilisation and construction activities.

The Bidder shall demonstrate its proposed site establishment arrangements and consider the requirements for establishment, operation, maintenance and eventual removal or handover of temporary construction facilities in its Stage 1 Qualification and Technical Proposals.

12 Construction Materials, Muck Management and Potential Sources

The DPR-2014 identified potential sources of construction materials required for the Project.

Potential sources include:

- i) suitable excavated material generated from the Project Works;
- ii) rock quarry sources in the vicinity of the Dam;
- iii) the Tititar quarry area; and
- iv) river-borne material and shoal deposits downstream of the Wangchhu-Piping confluence.

These potential sources are identified for preliminary information only.

Bidders shall assess the suitability, quality, quantity, availability, environmental acceptability, regulatory requirements, processing requirements, haulage arrangements and overall suitability of any material source proposed for use in the Works.

Excavated material suitable for reuse may be processed and utilised for aggregates, filling or other construction purposes. Surplus or unsuitable material shall be disposed of in designated or approved muck disposal areas.

The Bidder shall demonstrate in its Construction Methodology its proposed approach to:

- i) material sourcing;
- ii) quarry development, where applicable;
- iii) crushing, screening and aggregate production;
- iv) concrete production and material storage;
- v) handling and transportation of excavated material;
- vi) reuse of suitable excavated material; and
- vii) environmentally compliant disposal and management of surplus muck.

13 Project Interfaces

Effective interface management will be essential because the Project is being implemented through multiple Contract Packages.

The Contractors shall coordinate all physical, technical, survey, construction, access, temporary works, programme and commissioning interfaces with the Employer, the Engineer and other Project Contractors.

Particular attention shall be given to:

- i) the interface between the separately awarded River Diversion Tunnel Works and WC I;
- ii) the interface between WC I and WC II at HRT Chainage 588;



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- iii) the interface between WC II and WC III at HRT Chainage 11+225;
- iv) interfaces between Civil and Hydro-Mechanical Works;
- v) interfaces between WC III and the Electro-Mechanical Package at the Surface Powerhouse, Transformer Yard, Switchyard and associated facilities;
- vi) common access roads and bridges;
- vii) shared construction power and other utilities;
- viii) survey controls and dimensional compatibility;
- ix) tunnel dimensions, lining and connection requirements;
- x) embedded parts and equipment foundations;
- xi) temporary facilities and shared construction areas; and
- xii) construction sequencing and access requirements between adjoining Contracts.

The Stage 1 Qualification and Technical Proposals shall demonstrate the Bidder's understanding of the interfaces relevant to the Contract Package and its proposed approach to interface planning, coordination, information exchange and resolution of interface issues.

14 Environmental and Social Information

Environmental, social and technical studies have previously been undertaken as part of Project development.

Available Project documentation includes the 2014 DPR, existing Environmental and Social Impact Assessment documentation and associated environmental, hydrological, geological, geotechnical, biodiversity and socio-economic information.

WHPL has initiated the process for preparation of an updated comprehensive Environmental and Social Impact Assessment to reflect current Project conditions and applicable regulatory and Project requirements.

Bidders shall demonstrate their Environmental, Social, Health and Safety capability as part of the Stage 1 Qualification and Technical Proposals in accordance with Section 4.

The Bidder's Stage 1 Qualification and Technical Proposals shall demonstrate an understanding of the principal ESHS risks associated with major hydropower construction, including:

- i) surface and underground excavation;
- ii) blasting and explosives;
- iii) slope stability and rockfall;
- iv) tunnelling and underground ventilation;
- v) heavy Construction Plant and Equipment;
- vi) work at height and in confined spaces;
- vii) traffic and transportation;
- viii) spoil and muck disposal;
- ix) water management and sediment control;
- x) worker accommodation and labour management;
- xi) community health and safety; and
- xii) environmental protection and pollution prevention.

Detailed environmental and social obligations applicable during execution shall be defined in the final Employer's Requirements and Contract Documents.

15 Construction Constraints and Key Site Considerations

Bidders shall take into consideration the principal physical, climatic, logistical, geological, operational and design-development conditions that may affect execution of the Works.

These include, but are not limited to:

- i) remote Project location, long transportation distances and restrictions associated with roads, bridges and movement of heavy Construction Plant and Equipment;
- ii) heavy monsoon rainfall, landslides, flooding, erosion, road breaches and temporary disruption of access;
- iii) interruptions, voltage fluctuations and limitations in construction power supply;



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- iv) variable geological and geotechnical conditions, including groundwater inflows, weak, fractured or sheared rock and associated excavation and support requirements;
- v) extensive foundation excavation, abutment cutting, slope stabilisation and treatment at the Dam, Intake and Surface Powerhouse areas;
- vi) large-scale underground excavation associated with the HRT, Surge Shaft and Pressure Shafts;
- vii) high-volume concrete production and placement, large quantities of excavation, material handling and muck disposal;
- viii) limited and shared construction areas, simultaneous execution of multiple construction fronts and interfaces with other Contract Packages;
- ix) coordination of Civil, Hydro-Mechanical and Electro-Mechanical Works and maintenance of access, utilities and construction services during execution; and
- x) reasonable refinement of Project Layout, design parameters and construction requirements arising from ongoing detailed engineering and supplementary seismic, topographical, geological, geotechnical, hydrological and sedimentation studies.

Bidders shall consider these conditions when preparing their Stage 1 Construction Methodology, preliminary Construction Programme, Construction Plant and Equipment deployment, resource planning, logistics, interface-management and risk-management proposals.

The Bidder shall demonstrate that its experience, technical capability, resources, organisation and proposed construction approach are appropriate for the complexity and constraints of the relevant Contract Package and sufficient to achieve the specified Time for Completion, quality and ESHS requirements.



SECTION 6 - ABSTRACT OF CONDITIONS OF CONTRACT

1 General Conditions of Contract

The Conditions of Contract for the Works shall be based on the Conditions of Contract published by the Fédération Internationale des Ingénieurs-Conseils (FIDIC), namely the Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer (Red Book, Second Edition 2017), as amended and supplemented by the Particular Conditions.

The Conditions of Contract shall comprise the FIDIC General Conditions, together with the Particular Conditions – Part A: Contract Data and Part B: Special Provisions, and other relevant contractual documents, as applicable. The complete Conditions of Contract, including the Particular Conditions, shall be issued as part of the Stage 2 Bidding Documents.

The reference to the proposed Conditions of Contract in this Stage 1 Bidding Document is provided to inform Bidders of the Employer's intended contractual framework for the Works.

1.1 Particular Conditions: Part A – Contract Data (Summary)

The information contained in this summary is preliminary and indicative and is intended to assist Bidders in understanding the proposed contractual framework and in preparing their Stage 1 submissions. It does not constitute the final Contract Data.

Conditions	Sub-Clause	Data
Defects Notification Period	1.1.27	36 months
Time for Completion of Works	1.1.84	48 months including the mobilization period
Governing Law	1.4	Laws of Kingdom of Bhutan
Ruling language	1.4	English
Language for communications	1.4	English
Time for the Parties to sign a Contract Agreement	1.6	Within 28 days after issuance of the Letter of Acceptance
Right of Access to the Site	2.1	No later than the Commencement Date
Performance Security	4.2	The Performance Security will be in the form of an “ <i>unconditional demand bank guarantee</i> ” in the amount of 10% of the Accepted Contract Amount.
Maximum allowable accumulated value of work subcontracted (as a percentage of the Accepted Contract Amount)	5.1(a)	As per the discretion of the Employer/Engineer.
Parts of the Works for which subcontracting is not permitted	5.1(b)	As per the discretion of the Employer
Engagement of Staff and Labour	6.1	The Contractor shall allocate not less than 30% of the total labour cost under the contract to the employment of local Contractor's Personnel (local labour) with appropriate skills and experience.
Normal working hours	6.5	24 hours a day by shifts
Delay damages payable for each week of delay	8.8	0.35 % per week
Maximum amount of delay damages	8.8	10% of the Contract Price
Percentage of retention	14.3(iii)	5% of IPC
Limit of Retention Money	14.3(iii)	5% of Contract Price
Period for the Employer to make interim payments to the Contractor under Sub-Clause 14.6 (interim Payment)	14.7b(i)	Within 42 days after receiving the certification from the Engineer.
Period for the Employer to make interim payments to the Contractor under Sub-Clause 14.13 (Final Payment)	14.7b(ii)	Within 56 days after receiving the certification from the Engineer.



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Conditions	Sub-Clause	Data
Period for the Employer to make final payment to the Contractor	14.7(c)	Within 84 days after receiving the performance certificate.
Forces of nature, the risks of which are allocated to the Employer/Owner and Contractor	17.2(d)	Contractor: Construction All Risks Insurance Policy including Third Party Liability.
Time for appointment of DAAB member (s)	21.1	Within 42 days from the date of notification for a request for appointment of DAAB member by either party
The DAAB shall be comprised of	21.1	Three (3) Members, and the DAAB shall have jurisdiction to hear and determine disputes with a value not exceeding BTN 100 million.
List of proposed members of DAAB	21.1	To be confirmed within 14 days from the date of notification for a request for appointment of a DAAB member by either party.

Note:

- i) *The complete Contract Data, Particular Conditions – Part B: Special Provisions, forms of securities and other contractual requirements shall be provided in the Stage 2 Bidding Documents.*



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1.2 Particular Conditions: Part B - Special Provisions (Summary)

The summary is intended to provide Stage 1 Bidders with an overview of the principal project-specific contractual requirements and areas of risk allocation presently envisaged by the Employer. The complete **Particular Conditions – Part B: Special Provisions**, including the detailed amendments, additions and supplements to the FIDIC General Conditions, shall be issued as part of the Stage 2 Bidding Documents.

Sub-Clause 4.1 Contractor's General Obligations	The Contractor shall make its own arrangements for the supply of all materials and consumables necessary for the execution of the Works. The Contractor shall ensure the availability at the Site of adequate quantities of materials and consumables required for the Works. The Contractor shall maintain sufficient stocks of P.O.L. and key construction materials to meet the anticipated requirements for at least one (1) month, so as to minimize the risk of disruption or delay to the progress of the Works due to shortages or interruptions in supply.
Sub-Clause 4.8 Health and Safety Obligations	The Contractor shall establish and maintain fully equipped medical facilities at the main construction camp and at each major work site. Such facilities shall be staffed by the required OHS Key Personnel, including qualified Medical Professionals, on a full-time basis to ensure twenty-four (24) hour medical coverage. The Contractor shall provide and maintain at the Site a minimum of two (2) fully equipped ambulances, acceptable to the Employer, at all times. The Contractor shall also establish and maintain a formal medical referral arrangement with the nearest district hospital.
Sub-Clause 4.16 Transportation of Goods	The Contractor shall give preference to Bhutanese service providers for the transportation of Goods for the Project. Where the Contractor is unable to obtain such services from Bhutanese service providers, the Contractor shall demonstrate to the Employer that reasonable efforts have been made to procure such services from Bhutanese service providers.
Sub-Clause 4.19 Temporary Utilities	The Employer shall provide construction power at designated points of supply for the execution of the Works. The Contractor shall, at its own cost, make all necessary arrangements for the distribution of power from the designated points of supply to its work sites, construction plant and equipment, workshops, camps, offices and other facilities. The Contractor shall be responsible for the payment of applicable energy charges in accordance with the applicable tariff and payment arrangements. The detailed arrangements for construction power, including the points of supply and other applicable requirements, shall be specified in the Stage 2 Bidding Documents.
Sub-Clause 4.21 Security of the Site	The Contractor shall be responsible for the security of the Site and for preventing unauthorized access to the Site. Authorized persons shall include the Contractor's Personnel, the Employer's Personnel, and such other persons as may be authorized by the Employer or the Engineer. The Contractor shall ensure that personnel engaged to provide security are appropriately screened, qualified and trained, and that they perform their duties in accordance with applicable Laws and the requirements specified in the Employer's Requirements.
Sub-Clause 4.26 Land	The Employer shall make available, free from encumbrances, the land required for the Permanent Works and such designated areas as may be identified by the Employer for Muck Disposal Sites (MDS), explosive magazines and Contractor's construction facilities. The Contractor shall be responsible for the development and preparation of the areas made available by the Employer for its construction facilities and for the



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	development of the designated Muck Disposal Sites, as required for execution of the Works. Any additional land required by the Contractor beyond the areas made available by the Employer shall be arranged by the Contractor at its own cost and responsibility. The Contractor shall obtain the permits and clearances required under applicable Laws for its construction facilities. The Employer shall provide reasonable assistance, where required, in facilitating the necessary statutory clearances. Detailed land availability, designated areas and respective responsibilities of the Employer and the Contractor shall be specified in the Stage 2 Bidding Documents.
Sub-Clause 4.27 Explosive Magazine	The Contractor shall, at its own cost, arrange all facilities required for the storage and transportation of explosives for execution of the Works, including approved permanent and/or portable explosive magazines and explosive vans, as applicable. The Contractor shall be responsible for obtaining and maintaining all necessary licences, permits and approvals in accordance with applicable Laws.
Sub-Clause 4.28 Bank Guarantees	All Bank Guarantees either issued by a bank/financial institutions in Bhutan or any acceptable foreign Bank through a corresponding financial institution in Bhutan to make it enforceable.
Sub-Clause 6.4 Labour Laws	The Contractor shall comply with all applicable Laws of the Kingdom of Bhutan relating to employment, labour, foreign workers, occupational health and safety, and the welfare of workers.
Sub-Clause 6.6 Facilities for Staff and Labour	The Contractor shall give access to or provide services that accommodate the physical, social and cultural needs of the Contractor's Personnel.
Sub-Clause 6.7 Health and Safety of Personnel	The Contractor shall take all necessary measures to ensure the health, safety and welfare of the Contractor's Personnel throughout the execution of the Works, in accordance with applicable Laws and, where relevant, the following standards and guidelines: a) Occupational Health and Safety Regulations of Bhutan 2022; b) International Tunnelling Association Guidelines for Good Occupational Health & Safety Practice, 2008; c) International Labour Organization Code of Practice on Safety and Health in Construction, 1992; d) BS 6164:2019 – Health and safety in tunnelling in the construction industry; e) Safety Regulation 2008 of the Electricity Regulatory Authority (ERA); and f) Road Safety and Transport Regulations 2021.
Selected additional Sub-Clauses under Clause 6 [Staff and Labour] are summarized below.	
Sub-Clause 6.13 Foreign Personnel	The Contractor may employ foreign personnel necessary for the execution of the Works, subject to applicable Laws of the Kingdom of Bhutan. The Contractor shall be responsible for obtaining and maintaining all necessary work permits, visas and other approvals required for such personnel. The Employer shall, upon the Contractor's request, provide reasonable assistance in facilitating the necessary approvals from the relevant authorities.
Sub-Clause 6.14 Supply of Foodstuffs	To the maximum extent practicable, the Contractor shall source agricultural produce, food supplies and related materials from local farmers, cooperatives and suppliers within the Project area and adjoining Dzongkhags.



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Sub-Clause 6.16 Alcoholic Liquor or Drugs	The Contractor shall ensure that the importation, possession, sale, distribution and consumption of alcoholic liquor or drugs by the Contractor's Personnel are in accordance with the applicable Laws of the Kingdom of Bhutan.
Sub-Clause 6.17 Arms and Ammunition	The Contractor shall ensure that the possession, use, transfer or disposal of any arms or ammunition by the Contractor's Personnel is strictly in accordance with the applicable Laws of the Kingdom of Bhutan.
Sub-Clause 6.18 Festivals and Religious Customs	The Contractor shall respect the Country's recognized festivals, days of rest and religious or other customs.
Sub-Clause 6.19 Funeral Arrangements	The Contractor shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of its local employees who may die while engaged upon the Works.
Sub-Clause 6.20 Forced Labour	The Contractor, including its Subcontractors, shall not employ or engage forced labour. Forced labour consists of any work or service, not voluntarily performed, that is exacted from an individual under threat of force or penalty, and includes any kind of involuntary or compulsory labour, such as indentured labour, bonded labour or similar labour-contracting arrangements. No persons shall be employed or engaged who have been subject to trafficking. Trafficking in persons is defined as the recruitment, transportation, transfer, harbouring or receipt of persons by means of the threat or use of force or other forms of coercion, abduction, fraud, deception, abuse of power, or of a position of vulnerability, or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purposes of exploitation.
Sub-Clause 6.21 Child Labour	The Contractor, including its Subcontractors, shall not employ or engage a child under the age of 18 unless the national law specifies a higher age (the minimum age).
Sub-Clause 7.8 Royalties	The Contractor shall pay royalties, rent and other payments or compensations, if any, for getting stone, aggregates, sand, gravel, clay or any other materials required for the Works.
Sub-Clause 13.7 Adjustments for Changes in Cost	The Contract Price shall be subject to adjustment to reflect changes in the cost of cement, steel, fuel, and labour during the execution of the Works. The adjustment mechanism shall be based on designated Base Rates for cement, steel, and fuel, while labour adjustments shall be determined using the Labour Cost Index published by the Ministry of Labour and Employment, Government of India.
Sub-Clause 14.1 The Contract Price	The Contractor is required to abide by the following Tax Acts and its Rules and Regulations in force: i) Income Tax Act of Bhutan 2025 and its Rules 2025 ii) Goods and Services Tax (GST) Act 2020 and its amendments thereof. iii) Goods and Services Tax (GST) Rules 2026 iv) Excise Tax Act of Bhutan 2025. v) Customs Duty Act of Bhutan 2021, Customs Rules and Regulations of Bhutan 2017 and its Revised Edition 2023. Bidders participating from India, for supply and bonafide use in the Kingdom of Bhutan shall quote the rates and prices for the items in the Bill of Quantities exclusive of any effect of the Integrated Goods and Service Tax (IGST). The IGST on the export of goods or services or both are covered under Zero Rated Supply as per Chapter VII, 16(1) THE INTEGRATED GOODS AND SERVICES TAX ACT, 2018 of India.



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Sub-Clause 14.2 Advance Payment	(a) Mobilization Advance: 10% of the Accepted Contract Amount, interest free and payable in two installments. Payable against submission of an unconditional bank guarantee for an equivalent amount. (b) Advance for Construction Equipment: Up to 90% of the invoiced value of new construction equipment procured specifically for the Project. Payable subject to submission of satisfactory documentary evidence and an equivalent bank guarantee. The aggregate amount of equipment advances shall not exceed 10% of the Accepted Contract Amount. (c) Secured Advance (Material Advance) Up to 75% of the invoiced value of approved construction materials delivered to Site for incorporation into the Permanent Works. Payable in accordance with the Contract. Eligible materials include cement, reinforcement steel, structural steel, explosives, aggregates, and other materials approved by the Engineer. Recovery of all advances shall commence once the cumulative value of certified Interim Payment Certificates reaches 10% of the Accepted Contract Amount and shall be completed before certification of 80% of the Accepted Contract Amount.
Sub-Clause 21.6 Arbitration	Any dispute not resolved in accordance with the dispute avoidance and adjudication procedures specified in the Contract shall be finally settled by arbitration in accordance with the Rules of Arbitration of the Singapore International Arbitration Centre (SIAC). The seat and venue of arbitration shall be Thimphu, Bhutan



SECTION 7 - STAGE 1 SUBMISSION FORMS

Form 1 Letter of Submission for Stage 1 Bidding

Date of this Bid submission: *[insert date (as day, month and year) of Bid submission]*

Request for Bid No.: *[insert identification]*

To: *[insert complete name of Employer]*

We, the undersigned, hereby submit our Qualification and Technical Proposal for Stage 1 Bidding.

In submitting our Bid, we make the following declarations:

- a) No reservations:** We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidder;
- b) Eligibility:** We meet the eligibility requirements and have no conflict of interest in accordance with ITB 3;
- c) Bid Security:** We have furnished the Bid Security in accordance with ITB 18 and the requirements specified in the Bid Data Sheet
- d) Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment (SH):** *[select the appropriate option from (i) to (v) below and delete the others].*

We *[where JV, insert: “including any of our JV members”]*, and any of our subcontractors:

- i) *[have not been subject to disqualification for non-compliance with SEA/ SH obligations.]*
- ii) *[are subject to disqualification for non-compliance with SEA/ SH obligations.]*
- iii) *[had been subject to disqualification for non-compliance with SEA/ SH obligations. An arbitral award on the disqualification case has been made in our favor.]*
- iv) *[had been subject to disqualification for non-compliance with SEA/ SH obligations for a period of two years. We have subsequently provided and demonstrated that we have adequate capacity and commitment to comply with SEA and SH prevention and response obligations.]*
- v) *[had been subject to disqualification for non-compliance with SEA/ SH obligations for a period of two years. We have attached documents demonstrating that we have adequate capacity and commitment to comply with SEA and SH prevention and response obligations.]*
- e) Conformity:** We offer to execute in conformity with the Bidding Documents the following Works: *[insert a brief description of the Works]*
- f) Bid Validity:** Our Bid shall be valid until *[insert day, month and year in accordance with ITB 17.1]*, and it shall remain binding upon us and may be accepted at any time on or before this date;
- g) One Bid Per Bidder:** We are not submitting more than one Bid for this Contract Package, either individually or as a Joint Venture member, in accordance with ITB 6.1. Participation in bidding for other Contract Packages of the Project shall not constitute multiple participation under this provision.
- h) Suspension and Debarment:** We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension. Further, we are not ineligible under the Employer’s country laws or official regulations or pursuant to a decision of the United Nations Security Council;



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- i) **State-owned enterprise or institution:** [select the appropriate option and delete the other] [We are not a state-owned enterprise *or institution*] / [*We are a state-owned enterprise or institution and* meet the applicable eligibility requirements specified in the Bidding Documents.]
- j) **Not Bound to Accept:** We understand that the Employer is not bound to determine any Bidder Qualified or to invite any Bidder to participate in Stage 2, except in accordance with the Bidding Documents.
- k) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption;

Name of the Bidder: *[insert complete name of the Bidder]

Name of the person duly authorized to sign the Bid on behalf of the Bidder: ** [insert complete name of person duly authorized to sign the Bid]

Title of the person signing the Bid: [insert complete title of the person signing the Bid]

Signature of the person named above: [insert signature of person whose name and capacity are shown above]

Date signed [insert date of signing] **day of** [insert month], [insert year]

*: In the case of the Bid submitted by joint venture, specify the name of the Joint Venture as Bidder

**: Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid



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Form 2: Bidder Information Form

Date: _____

RFB No. and date : _____

Title _____

<i>Bidder's name</i>
<i>In case of Joint Venture (JV), name of each member:</i>
<i>Bidder's actual or intended country of registration:</i> <i>[indicate country of Constitution]</i>
<i>Bidder's actual or intended year of incorporation:</i>
<i>Bidder's legal address [in country of registration]:</i>
<i>Bidder's authorized representative information</i> Name: _____ Address: _____ Telephone: _____ E-mail address: _____
1. Attached are copies of original documents of • Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, • In case of a JV, Letter of Intent to form a JV or JV Agreement, in accordance with the requirements of the Bidding Documents. <i>In case of state-owned enterprise or institution, documents establishing:</i> • Legal and financial autonomy • Operation under commercial law • Establishing that the Bidder is not under the supervision of the Employer 2. Included are the organizational chart, a list of Board of Directors, and the information on beneficial ownership. The successful Bidder shall provide additional information on beneficial ownership, using the Beneficial Ownership Disclosure Form.



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Form 3: Qualification Form - Financial Capacity

Bidder's Name: _____

Date: _____

JV Member's Name _____

RFB No. and title: _____

1. Financial data

Type of Financial information in (currency)	Historic information for previous five financial years (amount in currency, currency, exchange rate*, BTN/INR equivalent)				
	Year 1	Year 2	Year 3	Year4	Year 5
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

2. Sources of Finance

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.



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No.	Source of finance	Amount (BTN/INR equivalent)
1	Line of credit	
2		
3		

Financial documents

The Bidder and, in the case of a Joint Venture, each JV member shall provide copies of audited financial statements for the last five (5) financial years pursuant to Section 4 [Qualification and Technical Requirements Criteria].

- (a) reflect the financial situation of the Bidder or in case of a JV member, and not an affiliated entity (such as parent company or group member).
- (b) be independently audited or certified in accordance with local legislation.
- (c) be complete, including all notes to the financial statements.
- (d) correspond to accounting periods already completed and audited.

Attached are copies of financial statements ^[1] for the last five (5) years required above.

[1] If the most recent set of financial statements is for a period earlier than 12 months from the date of Bid, the reason for this should be justified.



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Form 4: Average Annual Turnover Data

Bidder's Name: _____

Date: _____

JV Member's Name _____

RFB No. and title: _____

		<i>Annual turnover data</i>	
<i>Year</i>	<i>Amount Currency</i>	<i>Exchange rate</i>	<i>BTN/INR equivalent</i>
<i>[indicate year]</i>	<i>[insert amount and indicate currency]</i>		
<i>Average Annual Turnover *</i>			

* The Average Annual Construction Turnover shall be calculated as the average of the three highest annual construction turnovers achieved during the last five (5) financial years, in accordance with Section 4 [Qualification and Technical Requirements Criteria].



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Form 5: Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as specified in Section 4 *Qualification and Technical Requirements Criteria*.

<i>Financial Resources</i>		
<i>No.</i>	<i>Source of financing</i>	<i>Amount (BTN/INR)</i>
1		
2		
3		



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Form 6: General Construction Experience

Bidder's Name: _____

Date: _____

JV Member's Name _____

RFB No. and title: _____

Starting Year	Ending Year	Contract Identification	Role of Bidder
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	



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Form 7: Specific Construction and Contract Management Experience

Bidder's Name: _____

Date: _____

JV Member's Name _____

RFB No. and title: _____

<i>Similar Contract No.</i>	<i>Information</i>			
<i>Contract Identification</i>				
<i>Award date</i>				
<i>Completion date</i>				
<i>Role in Contract</i>	<i>Prime Contractor</i>	<i>Member in JV</i>	<i>Management Contractor</i>	<i>Subcontractor</i>
<i>Total Contract Amount</i>				<i>BTN/INR</i>
<i>If member in a JV or Subcontractor, specify participation in total Contract amount</i>				
<i>Employer's Name:</i>				
<i>Address:</i> <i>Telephone #</i> <i>E-mail:</i>				

Similar Contract No.	Information
Description of the similarity in accordance with Section 4:	
1. Amount	
2. Physical size of required works items	
3. Complexity	
4. Methods/Technology	
5. Construction rate for key activities	
6. Other Characteristics	



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Form 8: Construction Experience in Key Activities

Bidder's Name: _____

Date: _____

Bidder's JV Member Name: _____

Subcontractor's Name: _____

RFB No. and title: _____

All Subcontractors for key activities must complete the information.

Key Activity No 1: _____

	Information			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor	Member in JV	Management Contractor	Subcontractor
Total Contract Amount			BTN/INR	
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	Total quantity in the contract (i)	Percentage participation (ii)		Actual Quantity Performed (i) x (ii)
Year 1				
Year 2				
Year 3				
Year 4				
Employer's Name:				
Address: Telephone/fax number E-mail:				
Description of the key activities				

2. Activity No. 2

3. Activity No. 3

4.....



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Form 9: Key Personnel Forms

Date: _____

RFB No. and date: _____

Title _____

Bidders shall provide the names and details of the suitably qualified Contractor's Representative and Key Personnel proposed for the execution of the Works. The data on their experience shall be provided using Form below for each candidate.

Contractor's Representative and Key Personnel

1.	Title of position:	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g., attach high level Gantt chart)]</i>



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Form 10: Resume and Declaration Contractor's Representative and Key Personnel

Name of Bidder		
Position [#1]: <i>[title of position from Form 6.7]</i>		
Personnel information	Name:	Date of birth:
	Address:	E-mail:
	Citizenship:	Country of Residence:
	Professional qualifications:	
	Academic qualifications:	
	Language proficiency: <i>[language and levels of speaking, reading and writing skills]</i>	
Details		
	Address of employer:	
	Telephone:	Contact (manager / personnel officer):
	Fax:	
	Job title:	Years with present employer:

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

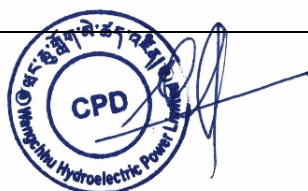
Project	Role	Duration of involvement	Relevant experience
<i>[main project details]</i>	<i>[role and responsibilities on the project]</i>	<i>[time in role]</i>	<i>[describe the experience relevant to this position]</i>

Declaration

I, the undersigned *[insert either "Contractor's Representative" or "Key Personnel" as applicable]*, certify that to the best of my knowledge and belief, the information contained in this Form correctly describes myself, my qualifications and my experience.

I confirm that I am available as certified in the following table and throughout the expected time schedule for this position as provided in the Bid:

Commitment	Details
Commitment to duration of contract:	<i>[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]</i>
Time commitment:	<i>[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]</i>



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I understand that any misrepresentation or omission in this Form may:

1. be taken into consideration during Bid evaluation;
2. result in my disqualification from participating in the Bid
3. result in my dismissal from the contract.

Name of Contractor's Representative or Key Personnel: *[insert name]*

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Bidder:

Signature: _____

Date: (day month year): _____



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Form 11: Plants & Equipment Forms

Date: _____

RFB No. and date : _____

Title _____

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment and machineries listed under Section 4, Qualification and Technical Requirements Criteria. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

Item of equipment		
Equipment information	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
Current status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment o Owned o Rented/Hired	
Technical Data Sheet	Required to be submitted	

Omit the following information for equipment owned by the Bidder.

Owner	Name of owner	
	Address of owner	
	Telephone	Contact name and title
	Email	Email
Agreements	Details of rental/hiring agreements to be submitted	

In addition to the Key equipment and Machineries, the bidder shall submit the list of Equipment and Machineries to meet the Proposed Construction Methodology and Schedule.

Further, a Progressive Equipment and Machineries Deployment Schedule on a quarterly basis aligned with Proposed Construction Schedule as outlined below shall be submitted:

Work Front	Proposed No.	2027						
		Q1	Q2	Q3	Q4			
Work Front-1								



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Work Front	Proposed No.	2027						
<i>Equip-1</i>								
<i>Equip-2</i>								
Work Front-2								
<i>Equip-1</i>								
<i>Equip-2</i>								



Form 12: Construction Methodology and Construction Programme

Date: _____

RFB No. and date : _____

Title _____

The Bidder shall submit its **Construction Methodology and Construction Programme** in accordance with **Section 4.7 [Construction Methodology and Construction Programme]** of the Bidding Documents.

The Construction Methodology submitted at Stage 1 shall be firm while the Construction Programme shall be preliminary and final Construction Programme shall be submitted along with Stage 2 Bidding.

Note: The Employer shall invite the Bidders to present the proposed Construction Methodology and Construction Programme, covering the key parameters stipulated in Bidding Documents.



Form 13: Technical Data Sheet – Hydro-Mechanical Works

Date: _____

RFB No. and date : _____

Title _____

The Bidder shall submit all the information, data and details from the manufacturer of each item of Hydromechanical Works, intended to be executed by the Bidder or through Specialist Subcontractor.

The Bidder may supply brochures, data sheets and drawings of standard supply items in which the actual types and specifications to be supplied are highlighted, if required.

The Bidder shall ensure that the Construction Programme submitted with his Bid in accordance with Technical Proposal Schedule shows the Bidder's proposed sequence with the estimated time for each activity for the design, manufacture, delivery, erection, installation and commissioning of these Works.

As a general requirement, the following information shall be prepared by the Bidder in his Bid:

- general layout drawings of each component of the hydromechanical equipment showing the type of construction and method of assembly, principal and special materials and principal dimensions;
- basic design calculation sheets for all major parts of each component of the hydromechanical equipment.



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Form 14: Declaration Forms

Form 14.1: Historical Contract Non-Performance, Pending Litigation and Litigation History

Bidder's Name: _____

Date: _____

JV Member's Name _____

RFB No. and title: _____

A. Non-Performed Contracts in accordance with Section 4, Qualification and Technical Requirements Criteria			
☐ Contract non-performance did not occur since 1 st January 2021 ☐ Contract(s) not performed since 1 st January 2021 - details provided below			
Year	Non- performed portion of contract	Contract Identification	Total Contract Amount (current value and currency)
[insert year]	[insert amount and percentage]	Contract Identification: [indicate complete contract name/ number, and any other identification] Name of Employer: [insert full name] Address of Employer: [insert street/ city/ country] Reason(s) for nonperformance: [indicate main reason(s)]	[insert amount]
B. Pending Litigation , in accordance with Section 4, Qualification and Technical Requirements Criteria			
The Bidder/JV Member shall disclose all pending litigation as at the Bid Submission Deadline.			
☐ No pending litigation. ☐ Pending litigation — details provided below.			

Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency)
		Contract Identification: _____ Name of Employer: _____ Address of Employer: _____ Matter in dispute: _____ Party who initiated the dispute: _____ Status of dispute: _____	
		Contract Identification: _____ Name of Employer: _____ Address of Employer: _____ Matter in dispute: _____ Party who initiated the dispute: _____ Status of dispute: _____	
C. Litigation History in accordance with Section 4, Qualification and Technical Requirements Criteria			



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The Bidder shall disclose all pending litigation as at the Bid Submission Deadline:

- ☐ No Litigation History
☐ Litigation History - details provided below

Year of award	Outcome as percentage of Net Worth	Contract Identification	Total Contract Amount (currency)
<i>[insert year]</i>	<i>[insert percentage]</i>	Contract Identification: <i>[indicate complete contract name, number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street / city / country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i> Party who initiated the dispute: <i>[indicate "Employer" or "Contractor"]</i> Reason(s) for Litigation and award decision <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>



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Form 14.2: Environmental and Social (ES), Occupational and Community Health and Safety (OCHS) Performance Declaration

Bidder's Name: *[insert full name]*

Date: *[insert day, month, year]*

Joint Venture Member's or Specialized Subcontractor's Name: *[insert full name]*

RFB No. and title: *[insert RFB number and title]*

The Bidder shall submit comprehensive Environmental and Social Management Strategies and Implementation Plans (ES-MSIP) as required under Section IV of the Bidding Document. These strategies and plans shall describe in detail the actions, materials, equipment, management processes, and institutional arrangements that will be implemented by the Contractor, and its subcontractors.

In developing these strategies and plans, the Bidder shall comply the best practice standards under following documents:

- i) Environmental and Social Management Plan (ESMP)
- ii) Occupational Health and Safety Management Framework (OHSMP)
- iii) Labour Management Procedure (LMP)

[The following table shall be filled in by the Bidder, each member of a Joint Venture and each Specialized Subcontractor]

Environmental and Social (ES), Occupational and Community Health and Safety (OCHS) Performance Declaration in accordance with Section 4, Qualification and Technical Requirements Criteria				
☐ No suspension or termination of contract: No employer has suspended or terminated a contract and/or called the Performance Security for reasons related to Environmental and Social (ES) and Occupational and Community Health and Safety (OCHS) performance during the period specified in Section 4 [Qualification and Technical Requirements Criteria]. ☐ Suspension or termination of contract: The following contract(s) has/have been suspended or terminated and/or the Performance Security called by an employer for reasons related to ES and OCHS performance during the period specified in Section 4 [Qualification and Technical Requirements Criteria]. Details are described below:				
Year	Suspended or terminated portion of contract	Contract Identification	Total Contract Amount	Copies of signed certificates from ongoing and ex-clients (Yes/No)



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[insert year]	[insert amount and percentage]	Contract Identification: [indicate complete contract name/ number, and any other identification] Name of Employer: [insert full name] Address of Employer: [insert street/city/country] Reason(s) for suspension or termination: [indicate main reason(s) e.g., gender-based violence; sexual exploitation or sexual abuse breaches]	[insert amount]	
[insert year]	[insert amount and percentage]	Contract Identification: [indicate complete contract name/ number, and any other identification] Name of Employer: [insert full name] Address of Employer: [insert street/city/country] Reason(s) for suspension or termination: [indicate main reason(s)]	[insert amount]	
		[list all applicable contracts]		
Performance Security called by an employer(s) for reasons related to ESHS performance				
Year	Contract Identification		Total Contract Amount	
[insert year]	Contract Identification: [indicate complete contract name/ number, and any other identification] Name of Employer: [insert full name] Address of Employer: [insert street/city/country] Reason(s) for calling of performance security: [indicate main reason(s) e.g., for gender-based violence; sexual exploitation or sexual abuse breaches]		[insert amount]	
	list all applicable contracts]			

Note: Learning from past failures and improved ES and OCHS management systems and controls adopted should be demonstrated with adequate documentary evidence.



Form 15: Bid Security (Bank Guarantee)

(To be executed on non-judicial Stamp papers/Legal Stamp of Appropriate value)

Date: _____

(Name of Contract)

To: (Name and address of Employer)

WHEREAS (name of Bidder) (hereinafter called “the Bidder”) has submitted its **Stage 1 Qualification and Technical Proposals** dated (date of Technical Proposal) for **(name/description of the procurement)** (hereinafter called “the Proposal”).

KNOW ALL PERSONS by these present that WE (name of Bank) of (address of bank) (hereinafter called “the Bank”), are bound unto (name of Employer) (hereinafter called “the Employer”) for the sum of: (amount), for which payment well and truly to be made to the said Employer, the Bank binds itself, its successors and assigns by these presents.

THE CONDITIONS of this obligation are as follows:

- i. If the Bidder withdraws its Stage 1 Qualification and Technical Proposals or varies any terms and conditions thereof during the period of Bid Validity; or
- ii. If the Bidder engages in corrupt, fraudulent, collusive or coercive practices in accordance with Clause 35 [Corrupt or Fraudulent Practices], or commits a default under the Integrity Pact; or
- iii. If the Bidder, having been notified by the Employer that it has successfully qualified at Stage 1 and is eligible to proceed to Stage 2, **fails or refuses, without justifiable reason, to participate in the Stage 2 Bidding Process.**

WE undertake to pay to the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer states that the amount claimed is due to the occurrence of one or more of the above conditions, specifying the condition or conditions that have occurred.

This guarantee will remain in force up to 120 days after the period of bid opening, and any demand in respect thereof must reach the Bank not later than the above date.

For and on behalf of the Bank

in the capacity of

Common Seal of the Bank



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Form 16: Specialist Subcontractor

The following Specialized Subcontractors are proposed for parts of the Works permitted by the Employer [state "Not Applicable," if not permitted]

No.	Part of the Works to be subcontracted	Specialized Subcontractor's name and address	Nationality	Specific Experience

The following [add: "other," if Specialized Subcontractors are included above. Bidders are free to propose more than one subcontractor for each part of the Works.] Subcontractors are proposed.

No.	Part of the Works to be subcontracted	Subcontractor's name and address	Nationality	Specific Experience



Form 17: Integrity Pact

Integrity Pact (Royal Government of Bhutan)

1. General

Whereas, Wangchhu Hydroelectric Power Limited (*hereafter referred to as the "Employer"*), ONE PART, and [*insert name of Bidder or his/her authorized representative, with power of attorney*] representing M/s [*insert name of firm*], (*hereafter referred to as the "Bidder"*), on the OTHER PART hereby execute this agreement as follows:

2. Objectives

Whereas, the Employer and the Bidder agree to enter into this agreement, hereinafter referred to as Integrity Pact, to avoid all forms of corruption or deceptive practice by following a system that is fair, transparent and free from any influence/unprejudiced dealings prior to, during and subsequent to the currency of the Contract to be entered into, with a view to:

- 2.1 Enable the Employer to obtain the desired contract at a reasonable and competitive price in conformity to the defined specifications of the works, goods and services; and
- 2.2 Enable Bidders to abstain from bribing or any corrupt practice in order to secure the contract by providing assurance to them that their competitors shall also refrain from bribing and other corrupt practices and the Employer shall commit to prevent corruption, in any form by their officials by following transparent procedures.

3. Commitments of the Employer

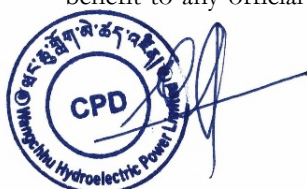
The Employer commits itself to the following:

- 3.1 The Employer hereby under takes that no official of the Employer, connected directly or indirectly with the Contract, shall demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward favour or any material or immaterial benefit or any other advantage from the Bidder, either for themselves or for any person, organization or third party related to the Contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the Contract.
- 3.2 The Employer further confirms that its officials have not favored any prospective Bidder in any form that could afford an undue advantage to that particular Bidder during the tendering stage, and shall further treat all Bidders alike.
- 3.3 All the officials of the Employer shall report to the Chief Executive Officer, Employer, any attempted/completed violation of clauses 3.1 and 3.2.
- 3.4 Following report on violation of clauses 3.1 and 3.2 by official (s), through any source, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the Employer and such a person shall be debarred from further dealings related to the Contract process. In such a case while an enquiry is being conducted by the Employer the proceedings under the Contract would not be stalled.

4. Commitments of Bidders

The Bidder commits himself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of his bid or during any pre-contract or post-contract stage in order to secure the Contract or in furtherance to secure it and in particular commits himself to the following:

- 4.1 The Bidder shall not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, commission, fees, brokerage, any materials or immaterial benefit to any official of the Employer, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the Contract.
- 4.2 The Bidder further undertakes that he has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, commission, fees, brokerage, any material or immaterial benefit to any official of the Employer or otherwise in procuring the Contract or forbearing to do or



having done any act in relation to the obtaining or execution of the Contract or any other contract with the Employer for showing or forbearing to show favour or disfavor to any person in relation to the Contract or any other contract with the Employer.

- 4.3 The Bidder shall not collude with other parties interested in the contract to preclude the competitive bid price, impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 4.4 The Bidder, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the Employer or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 4.5 The Bidder shall not enter into any monetary dealings or transaction, directly, with any tender committee member, and if he does so, the Employer shall be entitled forthwith to rescind the Contract and all other contracts with the Bidder.

5. Sanctions for Violation

The breach of any aforesaid provisions or providing false information by employers, including manipulation of information by evaluators, shall face administrative charges and penal actions as per the existing relevant rules and laws.

The breach of the Pact or providing false information by the Bidder, or any one employed by him, or acting on his behalf (whether with or without the knowledge of the Bidder), or the commission of any offence by the Bidder, or any one, employed by him, or acting on his behalf, shall be dealt with as per the provisions of the Penal Code of Bhutan, 2004, and the Anti – Corruption Act, 2006.

In the event of a breach, the Employer shall also take all or any one of the following actions, wherever required:

- 5.1 Immediately call off the pre-contract negotiations without giving any compensation to the Bidder. However, the proceedings with the other Bidder(s) would continue.
- 5.2 Immediately cancel the contract, if already awarded/signed, without giving any compensation to the Bidder.
- 5.3 Forfeit the Earnest Money/security deposited with the Employer.
- 5.4 Recover all sums already paid to the Bidder.
- 5.5 Encash the advance bank guarantee and performance bond /warranty bond, if furnished by the Bidder, in order to recover the payments, already made by the Employer, along with interest.
- 5.6 Cancel all or any other Contracts with the Bidder.
- 5.7 Debar the Bidder from entering into any bid from the Employer as per the Debarment Rule.

6. Examination of Books of Accounts

In case of any allegation of violation of any provisions of this integrity pact or payment of commission, the Employer/authorized persons or relevant agencies shall be entitled to examine the Books of Accounts of the Bidder and the Bidder shall provide necessary information of the relevant financial documents and shall extend all possible help for the purpose of such examination.

7. Monitoring and Arbitration

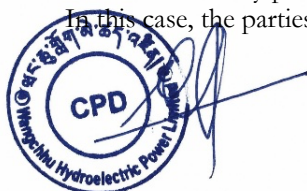
The Employer shall be responsible for monitoring and arbitration of IP as per the procurement rules.

8. Legal Actions

The actions stipulated in this integrity pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceeding as.

9. Validity

- 9.1 The validity of this integrity pact shall cover the tender process and extend until the completion of the contract to the satisfaction of both the employer and the Bidder.
- 9.2 Should one or any provision of this pact turn out to be invalid, the remainder of this pact remains valid. In this case, the parties shall strive to come to an agreement to their original intentions.



Contract Package: WC II - HRT
Stage 1 Qualification and Technical Proposals
Section 7 – Stage 1 Submission Forms

We, hereby declare that we have read and understood the clauses of this agreement and shall abide by it. Further, the information provided in this agreement is true and correct to the best of our knowledge and belief.

The parties here by sign this Integrity pact at:

Location:

Date:

EMPLOYER

BIDDER

(affix legal stamp)

(affix legal stamp)

Witness

Witness



Form 18: Power of Attorney

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS THAT WE, **[insert name of the Bidder]**, an entity incorporated under **[insert relevant statute/law of the country of incorporation]** and having its registered office at **[insert address]** (hereinafter referred to as the “**Bidder**”), do hereby constitute, appoint and authorize Mr./Ms. **[insert name, designation and address of the person to whom the Power of Attorney is being given]** as our true and lawful attorney to act in our name and on our behalf in connection with the submission of our Bid against RFB No. **[insert RFB No.]** issued by Wangchhu Hydroelectric Power Limited (the “**Employer**”).

We hereby authorize the said attorney to sign and submit the Bid and all documents and information relating thereto, including undertakings, letters, certificates, declarations, clarifications, acceptances, guarantees, amendments to the Bid, and other documents related to the Bid; to provide responses; and to represent us in all matters before the Employer in connection with the Bid until completion of the bidding process.

We hereby agree and undertake to ratify and confirm all lawful acts, deeds and things done or caused to be done by the said attorney pursuant to this Power of Attorney.

IN WITNESS WHEREOF, we have executed this Power of Attorney on this **[day]** day of **[month, year]** at **[place]**.

EXECUTANT

Signature.....
Name:
Designation.....

ACCEPTED:

Signature of Attorney.....
Name:
Designation.....

Signature of the Attorney Attested

.....

EXECUTANT

Name.....
Designation.....
Office Seal.....



SECTION 8 – APPENDICES

APPENDIX 1 REFERENCE DRAWINGS

The preliminary drawings included in this Appendix are based on the Detailed Project Report (DPR) 2014. However, the General Layout of the Project has been optimized, and a revised Layout is attached herewith for reference. This updated Layout incorporates the necessary adjustments arising from the optimization studies which may still go under revision with finalization of design parameters. These preliminary drawings shall be used by the prospective bidders for making assessment of the scope, extent and in preparing construction methodology and construction programme necessary for Stage 1 Bidding. The final tender level drawings shall be made available to the qualified bidders for Stage 2 Bidding.

APPENDIX 2 GEOLOGICAL AND GEOTECHNICAL REPORTS

The Detailed Project Report (DPR) October 2014 on Geological and Geotechnical Investigations is an updated version of the earlier DPR May 2014. It incorporates additional data, field observations, and analysis carried out subsequent to the issuance of the May 2014 Report, in order to present a more comprehensive assessment of the subsurface conditions at the project site. Accordingly, both the Chapters of the Geological and Geotechnical from DPR May 2014 and October 2014 have been attached below for reference.

APPENDIX 3 HYDROLOGICAL STUDIES

An updated hydrological study was carried out in 2025 using flow data from 1962 to 2024. However, this update was limited to the inflow series and energy estimates only; the flood study itself was not revised and still relies on the DPR 2014 analysis based on data from 1994 to 2009. Hence, the revised Hydrology Chapter, updated in October 2014, is attached below for the reference. This updated chapter incorporates the additional flow data for the period from 1994 to 2009. The Design Consultant is undertaking detailed hydrological studies and an updated hydrological parameter shall be incorporated into the design and made available to the qualified bidders under Stage 2 Bidding.

