

**MADHYA BHOTEKOSHI JALAVIDYUT COMPANY LIMITED**  
**MIDDLE BHOTEKOSHI HYDROELECTRIC PROJECT**



**Contract Identification No: MBJCL/MBKHEP/069/70/EM-1**

**PREQUALIFICATION DOCUMENTS**  
**FOR**

**Lot 2: Electromechanical Works**

**(Design, Manufacture, Supply, Installation, Testing and Commissioning of  
Electromechanical Equipment)**

**February 2013**  
**KATHMANDU**



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### ANNEX

Annex -1: General and Specific Information of the Project

## A. ABBREVIATIONS AND GLOSSARY

### A.1 Abbreviations

AC	Alternating Current
BOQ	Bill of Quantities
CHPCL	Chilime Hydropower Company Limited
DC	Direct Current
EIA	Environmental Impact Assessment
EL	Elevation
FIDIC	Federation Internationale des Ingenieurs-Conseils
GCC	General Conditions of Contract
GIS	Gas Insulated Switchgear
GITA	General Instructions to Applicants
GoN	Government of Nepal
GWh	Gigawatt Hour
HEP	Hydroelectric Project
HV	High Voltage
HVAC	Heating, Ventilating and Air Conditioning
IF	Information Forms
IFB	Invitation for Bids
IFP	Invitation for Prequalification
INPS	Integrated Nepal Power System
JV	Joint Venture
JVA	Joint Venture Agreement
kV	Kilovolt
LV	Low Voltage
MV	Medium Voltage
MVA	Megavolt Ampere
MW	Megawatt
NEA	Nepal Electricity Authority
PDB	Plant and Design Build
PQ	Prequalification
PITA	Particular Instructions to Applicants
MBKHEP	Middle Bhotekoshi Hydroelectric Project
MBJCL	Madhya Bhotekoshi Jalavidyut Company Limited
UPS	Uninterruptible Power Supply
VDC	Village Development Committee

## A.2 Glossary

Applicant	A firm or a Joint Venture that participates in this prequalification process with intent to participate in the bid for Lot 2 Electromechanical works of MBKHEP
Contract	Contract means Lot 2: Electromechanical Works (Design, Manufacture, Supply, Installation, Testing and Commissioning of Electromechanical Equipment)
Contractor	The legal entity that is party to and performs a works on this Contract, the other party to the Contract being the “Employer.”
Employer	MBJCL as one party to this Contract, the other party being the “Contractor.”
Engineer	A consultant, appointed by the Employer to act as Engineer for the purpose of this Contract.
Parent Company	"Parent Company" shall mean a company or a firm owning majority (at least 51%) shares of such applicant company. If Parent Company commits assured technical support and unhindered access to its assets and resources to applicant company, only then experience and other credentials of such Parent Company shall be considered for pre-qualification of the Applicant, provided such commitment is evidenced by the Parent Company.
Postqualification	An assessment made by the Employer after the evaluation of bids and prior to award of Contract, to ensure that the lowest evaluated, responsive and eligible bidder is qualified to perform the Contract in accordance with previously specified qualification requirements.
Prequalification	An assessment made by the Employer of the appropriate level of experience and capacity of firms expressing interest in undertaking a particular Contract, before inviting them to bid.
Prime contractor	A firm that performs a part of a design, manufacture, supply, installation, testing and commissioning of electromechanical equipment contract itself and the balance, if any, by subcontractors, while bearing full responsibility for the whole contract.
Project	Middle Bhotekoshi Hydroelectric Project

Provisional sum	A sum included provisionally in the BOQ of a contract, normally for a specialized part of the Works or for contingencies, which sum shall be used only on the instructions of the Employer/Engineer for payments to the Contractor and/or to nominated subcontractors.
Slice and package	A procedure whereby a large homogeneous project is sliced into smaller similar contracts, which are bid simultaneously so as to attract the interest of both small and large firms; firms offer bids on individual contracts (slices) or on a group of similar contracts (packages), and award is made to the combination of bids offering the lowest cost to the Employer. Slices comprising a number of similar construction units together in a small area are sometimes referred to as "lots," which are bid concurrently with other similar "lots" as part of the larger "package."
Turnover	The gross earnings of a firm normally expressed on an annual basis as shown in audited financial statements excluding income from other sources.
Writing	For the purpose of this document, any authenticated handwritten, typed, or printed communication, including facsimile transmission, with proof of receipt when requested by the sender.

## Section I Invitation for Prequalification

**MADHYA BHOTEKOSHI JALAVIDYUT COMPANY LIMITED (MBJCL)**  
**MIDDLE BHOTEKOSHI HYDROELECTRIC PROJECT (MBKHEP)**  
**(102 MW)**

**Invitation for Prequalification**  
**for**

**Lot 2: Electromechanical Works**

**Contract Identification No: MBJCL/MBKHEP/069/70/EM-1**

**(First Date of Publication of Notice: 3<sup>rd</sup> February 2013)**

1. This invitation for prequalification has been issued to all Electromechanical Works Contractors, who are eligible in accordance with the conditions stated in the Prequalification document, and who are interested in undertaking Design, Manufacture, Supply, Installation, Testing and Commissioning of Electromechanical Equipment for MBKHEP.
2. MBJCL is a company promoted by Chilime Hydropower Company Limited (CHPCL). MBJCL has completed the financial closure including the debt portion required for the Project with Employees Provident Fund (EPF) and equity investment will be made from CHPCL, Nepal Electricity Authority (NEA), local promoters and general public. Part of the proceeds of these resources shall be applied to eligible payments under the Contract for which this Prequalification has been issued.
3. Prequalification shall be based on the criteria contained in the Prequalification documents and is open to all eligible national and international electromechanical works contractors or their joint ventures.
4. Electromechanical equipment comprise of, but not limited to, Turbines, Generators, Transformers, Gas Insulated Switchgear and associated equipment.
5. A complete set of Prequalification documents may be purchased by interested applicants from 3<sup>rd</sup> February 2013 to 19<sup>th</sup> March 2013 during office hours on the submission of a written application to the address given below and upon the submission of a bank-voucher evidencing a non-refundable cash deposit of NRs. 25,000.00 (Nepalese Rupees Twenty-five thousand only) in favor of MBJCL in Current Account No. 00200105200313 in Everest Bank Ltd., New Road, Kathmandu, Nepal. Requests submitted by mail should include a certified cheque in the amount to the cost of Document as indicated above and applicable mailing/shipping charges in favor of MBJCL. MBJCL will promptly dispatch the documents by registered airmail, but under no circumstances can it be held responsible for late delivery or loss of the documents so mailed to the applicant. Applicants who choose to download the bidding document from the company's website must submit a bank voucher of cash deposit in the bank account and currency equivalent to the cost of document as indicated above at the time of submission. All the applicants, who will be qualified in the prequalification process, will obtain Bidding Documents free of costs in order to participate in the Bidding process.
6. Prequalification Documents along with one (1) original set and one (1) duplicate set of Prequalification Documents, having been signed on each page by authorized personnel, should be submitted in sealed envelopes and delivered to the address below on or before 20<sup>th</sup> March 2013 until 12:00 hours (local time). The Applications will be opened on 20<sup>th</sup> March 2013 at 14:00 hours (local time) at the Office of MBJCL. In case, the last date for purchasing or submission falls on a company holiday then the next working day shall be considered the last day. Documents received after the deadline will not be considered valid and will be returned unopened.
7. The number of partners in Joint Ventures is limited to two (2) and share of each partner in the Joint Venture shall not be less than 25% while the share of lead partner shall be at least 51%.
8. It is recommended that eligible applicants familiarize themselves with the local conditions and visit the project site. Cost incurred for preparation of applications and site visits are to be borne by the applicants.
9. MBJCL reserves the right to accept or reject any or all applications for prequalification and cancel the prequalification process and reject all applications without assigning any reason whatsoever.
10. The interested eligible applicants may obtain further information from the Address below or from the Company's URL address: <http://www.chilime.com.np>, <http://www.mbjcl.com.np>

**Address:**

Managing Director  
Madhya Bhotekoshi Jalavidyut Company Limited  
Kathmandu, Nepal  
Tel. No.: 977-1-4721641, 4721642  
Fax No.: 977-1-4721643  
Email: admin@mbjcl.com.np

## Section II General Instructions to Applicants (GITA)



## 1. Source of Funds and Scope of Works

### Source of Funds

- 1.1 Madhya Bhotekoshi Jalavidyut Company Limited (MBJCL) has made allocation of funds as described in PITA.

### Scope of Work

- 1.2 The Employer, as named in the PITA, intends to prequalify contractors for the Works described in the PITA.

### Slice and Package

- 1.3 If so indicated in the PITA, the total Works to be constructed have been divided into a number of similar individual contracts (slices) and bids will be invited concurrently for individual contracts and for combinations of contracts (packages). Bidders can bid on individual contracts only or on a combination of contracts within their prequalified capacity as assessed by the Employer. Qualification criteria for slice and package bidding are described in Sub-Clause 4.15.

### Bid Invitation

- 1.4 It is expected that prequalified applicants will be invited to submit bids during the month and year indicated in the PITA.

### Type of Contract

- 1.5 The bidding documents, type of contract, and method of payment, whether prices are fixed or adjustable, and the time for completion are indicated in the PITA.

### Site Information

- 1.6 General information on the climate, hydrology, topography, geology, access to site, transportation and communications facilities, medical facilities, project layout, expected construction period, facilities, services provided by the Employer, and other relevant data is attached as an Annex to the PITA.

## 2. Fraud and Corruption

- 2.1 MBJCL requires that the bidders/suppliers/contractors observe the highest standard of ethics during the procurement and execution of contracts. In pursuant to this policy, the MBJCL:
- i. defines, for the purposes of this provision, the terms set forth below as follows:
    - a. “**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; and
    - b. “**fraudulent practice**” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practices among bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the Employer of the benefits of free and open competition

- c. **"collusive practice"** is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
  - d. **"coercive practice"** is impairing or harming, or threatening to impair harm, directly or indirectly, any party or the property of the party to influence improperly the actions of the party;
  - e. **"obstructive practice"** deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators; and
- ii. shall not accept a proposal for award if it determines that the bidder recommended for award has engaged in corrupt or fraudulent or collusive, coercive, or obstructive practices in competing for the contract in question; and
  - iii. shall declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a MBJCL funded contract if it at any time determines that the firm has engaged in corrupt or fraudulent or collusive, coercive, or obstructive practices in competing for, or in executing, a MBJCL funded contract.

### 3. Eligibility of Countries and bidders

#### Eligible Countries

- 3.1 Except as provided in Sub-Clause 3.2 and 3.3, this Invitation for Prequalification is open to all eligible firms from Nepal for NCB contracts and Nepal and abroad for ICB contracts. The GoN maintains a list of countries from which bidders, goods, and the services are not eligible to participate in procurement. Joint Ventures between firms from Nepal and abroad shall be permitted to bid.

#### Eligible Bidders

- 3.2 A firm that has been engaged by the MBJCL to provide consulting services for the preparation or implementation of a project, and any of its affiliates, shall be disqualified from subsequently providing goods or works (other than a continuation of the firm's earlier consulting services) for the same project.
- 3.3 A firm declared ineligible by the GoN shall be ineligible to bid for a contract during the period of time determined by the GoN.

### 4. Qualification Criteria

#### General

- 4.1 Prequalification will be based on Applicants meeting minimum pass-fail criteria regarding their general and particular construction experience, financial position, personnel and equipment capabilities, and other relevant information as demonstrated by the Applicant's responses in the Information Forms attached to the Letter of Application. Additional requirements for joint ventures are given in Clause 5. The qualifications, capacity, and resources of proposed

subcontractors will not be taken into account in assessing those of individual or joint venture Applicants, unless they are named specialist subcontractors pursuant to Sub-Clause 4.4. and approved by the Employer.

### **Nominated Subcontracting**

4.2 If so listed in the PITA, the Employer intends to execute certain specialised elements of the Works by Nominated Subcontractors in accordance with the GCC of the bidding documents, and for which Provisional Sums will be included in the BOQ for the subject Works.

### **Subcontracting**

4.3 If an Applicant intends to subcontract parts of the Works such that the total of subcontracting is more than the percentage stated in the PITA of the Applicant's approximated Bid Price, that intention shall be stated in the Letter of Application, together with a tentative listing of the elements of the Works to be subcontracted.

### **Specialist Subcontracting**

4.4 If an Applicant intends to subcontract any highly specialised elements of the Works to specialist subcontractors, such elements and the proposed subcontractors shall be clearly identified and the experience and capacity of the subcontractors shall be described in the relevant Information Forms.

### **Acceptable Substitutes**

4.5 With reference to Sub-Clauses 4.3 and 4.4, the Employer may require Applicants to provide more information about their proposals. If any proposed subcontractor is found ineligible or unsuitable to carry out an assigned task, the Employer may request the Applicant to propose an acceptable substitute, and may conditionally prequalify the Applicant accordingly, before issuing an invitation to bid.

### **Contractor's Responsibility**

4.6 After award of contract, the subcontracting of any part of the Works, other than for the provision of labour and materials, or to subcontractors named in the Contract, shall require the prior consent of the Employer. Notwithstanding such consent, the Contractor shall remain responsible for the acts, defaults, and neglects of all subcontractors during contract implementation.

### **General Experience**

4.7 The Applicant shall provide evidence that:

- a. it has been actively engaged in the Electromechanical Works business for at least the period stated in the PITA immediately prior to the date of submission of applications, in the role of Prime contractor, partner in a joint venture, or subcontractor

and

- b. that the Applicant has generated an average annual Turnover during the above period greater than the amount stated in the PITA.

The average annual turnover is defined as the total of certified payment certificates for works in progress or completed by the firm or firms comprising the Applicant, divided by the number of years stated in the PITA.

While calculating the Turnover of the National Contractors for the past years the turnover amount shall be calculated in present value by deducting the VAT amount and then applying the inflation rate/index of the Nepal Rastra Bank. For calculating the average annual turnover, the turnover of the best three years out of last ten year's turnover shall be considered.

### Particular Experience

4.8

- a. The Applicant shall provide evidence that it has successfully completed or substantially completed at least the number of contracts stated in the PITA, of contract amount, nature, complexity, and requiring construction technology similar to the proposed contract, within the period stated in the PITA. The works may have been executed by the Applicant as a prime contractor or as management contractor, or as member of a joint venture or as subcontractor with references being submitted to confirm satisfactory performance.
- b. The Applicant shall also provide evidence that it has achieved the minimum monthly and/or annual production rates of the key construction activities described in the PITA under similar contract conditions.

### Financial Capabilities

- 4.9 The Applicant shall demonstrate that it has access to, or has available, liquid assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the cash flow requirements for the subject contract(s) in the event of stoppage, start-up, or other delays in payment, of the minimum estimated amount stated in the PITA, net of the Applicant's commitments for other contracts.

- 4.10 In the relevant Information Form, the Applicant shall also demonstrate, to the satisfaction of the Employer, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments. For this the Applicant's Bid Capacity shall be equal to or more than the value

of the Slice or Package for which the Applicant has submitted Application for prequalification.

- 4.11 The audited balance sheets or, if not required by the laws of the Applicant's country, other financial statements acceptable to the Employer, for the last ten years (unless otherwise stated in the PITA) shall be submitted and must demonstrate the current soundness of the Applicant's financial position and indicate its prospective long-term profitability. If deemed necessary, the Employer shall have the authority to make inquiries with the Applicant's Financers.

### Personnel Capabilities

- 4.12 The Applicant shall supply general information on the management structure of the firm, and shall make provision for suitably qualified personnel to fill the key positions listed in the PITA, as required during contract implementation. The Applicant shall supply information on a prime candidate and an alternate, if stated in PITA, for each key position, both of whom shall meet the experience requirements specified.

### Equipment Capabilities

- 4.13 The Applicant shall own, or have assured access (through hire, lease, purchase agreement, other commercial means, or approved subcontracting) to key items of equipment, in full working order, as listed in the PITA, and must demonstrate that, based on known commitments, they will be available for timely use in the proposed contract. The Applicant may also list alternative types of equipment that it would propose for use on the contract, together with an explanation of the proposal.

### Litigation History

- 4.14 The Applicant shall provide accurate information on the related Application Form about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the last five years. A consistent history of awards against the Applicant or any partner of a joint venture may result in disqualification of the application.

### Slice and Package

- 4.15 When applying for Prequalification on more than one contract under the slice and package arrangements, the Applicant must provide evidence that it meets or exceeds the sum of all the individual requirements for the slices or lots being applied for in regard to:
- average annual turnover (Sub-Clause 4.7 (b));
  - particular experience including key production rates

(Sub-Clause 4.8);

- c. financial capabilities, etc. (Sub-Clauses 4.9, 4.10, and 4.11);
- d. personnel capabilities (Sub-Clause 4.12); and
- e. equipment capabilities (Sub-Clause 4.13)

In case the Applicant fails to fully meet any of these criteria, it may be qualified only for those slices for which the Applicant meets the above requirement.

#### Clarification of Applications

- 4.16 To assist in the evaluation of Applications, the Employer may, at its discretion, ask any Applicant for a clarification of its application which shall be submitted within a stated reasonable period of time. Any request for clarification and all clarifications shall be in writing.

#### Right to Waive

- 4.17 The Employer reserves the right to waive minor deviations in the qualification criteria if they do not materially affect the capability of an Applicant to perform the contract.

### 5 Joint Ventures

#### Eligibility

- 5.1 If the Applicant comprises a number of firms with a formal intent to enter into an agreement or under an existing agreement in the form of a Joint Venture (JV), then all the partners to the JV shall be jointly and severally liable. A joint venture and the individual partners in the joint venture shall need to be registered in GoN, Internal Revenue Office before signing Contract Agreement.

#### Qualification Criteria

- 5.2 The joint venture must satisfy collectively the criteria of Clause 4. For this purpose the following data of each member of the joint venture shall be added together to meet the collective qualifying criteria. However, the Partner-in-charge and each individual partner of joint venture must meet the percentages respectively of the requirement as specified in the PITA of the criteria Sub – Clause 5.2(a), 5.2(c ) and 5.2 (d) below:
- a. average annual turnover (Sub-Clause 4.7 (b));
  - b. particular experience (Sub-Clause 4.8 (a)) and key production rates (Sub-Clause 4.8 (b));
  - c. cash flow (Sub-Clause 4.9);
  - d. adequate sources to meet financial commitments in this and other contracts (Sub-Clause 4.10),
  - e. personnel capabilities (Sub-Clause 4.12); and
  - f. equipment capabilities (Sub-Clause 4.13).

Each partner must satisfy the following criteria individually:

- a. General experience for the period of years stated in Sub-Clause 4.7 (a)
- b. adequate resource for completing the work in hand or committed new work (Sub-Clause 4.10),
- c. financial soundness (Sub-Clause 4.11), and
- d. litigation history (Sub-Clause 4.14).

In accordance with the above, the Application shall include all related information required under Clause 4 for individual partners in the joint venture.

### **Partner-in-Charge**

- 5.3 One of the partners, who is responsible for performing a key function in contract management or is executing a major component of the proposed contract, shall be nominated as being in charge during the Prequalification and bidding periods and, in the event of a successful bid, during contract execution. The partner-in-charge shall be authorised to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture; this authorisation shall be evidenced by submitting a power of attorney signed by legally authorised signatories of all the partners. Such authorization letter shall not be changed by the Applicant unilaterally and or without approval from the Employer.

### **Partner Limitation**

- 5.4 Limit on the number of partners in a JV shall be as stated in the PITA, however, the attention of Applicants is drawn to the provisions of Sub-Clause 5.5.

### **Joint and Several Liability**

- 5.5 All partners of the joint venture shall be legally liable, jointly and severally, during the bidding process and for the execution of the contract in accordance with the contract terms, and a statement to this effect shall be included in the authorisation mentioned under Sub-Clause 5.3 above.

### **Joint Venture Agreement**

- 5.6 A copy of the Joint Venture Agreement (JVA) entered into by the partners shall be submitted with the Application. Alternatively, a Letter of Intent to execute a JVA in the event of a successful bid shall be signed by all partners and submitted with the Application together with a copy of the proposed Agreement. Pursuant to Sub-Clauses 5.3 to 5.5 above, the JVA shall include among other things: the JV's objectives; the proposed management structure; the contribution of each partner to the joint venture operations; the commitment of the partners to joint and several liability for due performance; recourse/sanctions within the JV in the event of

default or withdrawal of any partner; and arrangements for providing the required indemnities.

Once submitted to the Employer such joint venture agreements shall not be changed by the Applicant unilaterally and or without approval from the Employer.

### Dissolution of Joint Venture

- 5.7 Prequalification of a joint venture Applicant does not necessarily prequalify any of its partners to bid individually or as a partner in any other joint venture or association. In case of dissolution of a joint venture prior to the submission of bids, any of the constituent firms may prequalify if they meet all of the prequalification requirements, subject to the written approval of the Employer. Individual members of a dissolved joint venture may participate as subcontractor to qualified Applicants, subject to the provisions of Sub-Clause 10.5.

## 6 Domestic Bidder Price Preference

### Eligibility

- 6.1 A domestic price preference for qualifying domestic bidders shall apply in bid evaluation as described in Sub-Clauses 6.2 and 6.3. On the basis of information submitted by Applicants and available at the time of notification, the Employer will inform prequalified Applicants of their apparent eligibility to qualify for the domestic bidder price preference (subject to subsequent confirmation at bid evaluation), in accordance with Sub-Clauses 6.2 and 6.3.

### Domestic bidders

- 6.2 Domestic bidders shall provide all evidence necessary to prove that they meet the following criteria to be eligible for a margin of preference stated below in the comparison of their bids with those of bidders who do not qualify for the preference.

Domestic bidders, which meet the following criteria, shall be given a preference as specified in PITA.

- a. for an individual firm or joint venture of firms:
  - i. each firm is registered in Nepal,
  - ii. each firm has more than 50 percent ownership by nationals of Nepal
  - iii. will not subcontract more than 50 percent of the total value of the Works to foreign contractors,
  - iv. satisfies any other criteria specified for the purpose of domestic preference eligibility in the Bidding Data.
- b. for a joint venture between domestic and foreign firms:
  - i. each domestic firm is eligible for the preference according to



the criteria stated in (a) above,

- ii. at least 50 percent share in the joint venture is held by the Nepalese firms as demonstrated by the profit and loss sharing provisions of the joint venture agreement,
- iii. will not subcontract more than 50% of the total value of the works to the foreign partner or other foreign firms,
- iv. satisfies any other criteria specified for the purpose of domestic preference eligibility in the Bidding Data.

### Foreign-Domestic Joint Venture

- 6.3 Joint ventures between domestic and foreign firms which meet the following criteria shall be given a preference as specified in PITA:
- i. each domestic firm is eligible for the preference according to the criteria stated in (a) above,
  - ii. between 25 and 50 percent interest in the joint venture is held by the Nepalese firms as demonstrated by the profit and loss sharing provisions of the joint venture agreement,
  - iii. will not subcontract more than 50% of the total value of the works to the foreign partner or other foreign firms,
  - iv. satisfies any other criteria specified for the purpose of domestic preference eligibility in the Bidding Data.

## 7 Request for Clarification

### Notification and Response

- 7.1 Applicants are responsible for requesting any clarification of the prequalification documents. A request for clarification shall be made in writing to the Employer's address indicated in the PITA. The Employer will respond to any request for clarification that it receives earlier than 15 days prior to the deadline for submission of application. Copies of the Employer's response, including a description of the inquiry but without identifying its source, will be forwarded to all purchasers of the prequalification document.

## 8 Amendment of Prequalification Document

### Amendment of Prequalification Document

- 8.1 At any time prior to the deadline for submission of Applications, the Employer may amend the Prequalification Document by issuing addenda as stated in PITA.
- 8.2 Any addendum issued shall be part of the Prequalification Document and shall be communicated in writing to all who have obtained the Prequalification Document directly from the Employer.

- 8.3 To give prospective Applicants reasonable time in which to take an addendum into account in preparing their Applications, the Employer may, at its discretion, extend the deadline for the submission of applications as stated in PITA.

## 9 Submission of Application

### Cost of Applications

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

### Delivery

- 9.2 Submission of application for Prequalification must be received in sealed envelopes either delivered by hand or by registered mail to the address, and not later than the time and date stated in the PITA or as modified in accordance with Sub-Clause 8.3. The name and mailing address of the Applicant shall be indicated on the envelope, which shall be clearly marked as indicated in the PITA. A receipt will be given for all applications submitted.

### Late Applications

- 9.3 Prequalification application received later than the specified time in Sub - Clause 9.2 shall be returned unopened.

### Language

- 9.4 All information requested for Prequalification shall be provided by Applicants in the language indicated in the PITA. Information may be provided in another language, but it shall be accompanied by an accurate translation of its relevant passages into the language indicated in the PITA. Such translation shall be attested by the Applicant's country representative offices in Nepal. This translation will govern and will be used for interpreting the information.

### Lack of Information

- 9.5 Failure of an Applicant to provide comprehensive and accurate information that is essential for the Employer's evaluation of the Applicant's qualifications, or to provide timely clarification or substantiation of the information supplied, may result in disqualification of the Applicant. If an Applicant cannot submit a particular document as stated in the PQ document then an equivalent document submitted by the Applicant's may be considered for evaluation.

### Material Changes

- 9.6 Subsequently prequalified or conditionally prequalified Applicants shall inform the Employer of any material change in information that might affect their qualification status. Bidders shall be required

to update key Prequalification information at the time of bidding. Prior to award of contract, the lowest evaluated bidder will be required to confirm its continued qualified status in a post qualification review process. If the status is found to be substantially of lower qualification than at the time of Prequalification, such bids shall be cancelled and not evaluated.

## 10 Employer's Notification and Bidding Process

### Invitation for Bids

10.1 Within the period stated in the PITA from the date for submission of applications, the Employer will notify all Applicants in writing of the results of their application, including eligibility for domestic bidder price preference, in accordance with GITA Clause 6, and of the names of all prequalified and conditionally prequalified applicants (see Sub-clause 10.2 below).

### Conditional Prequalification

10.2 An Applicant may be "conditionally prequalified," that is, qualified subject to certain specified nonmaterial deficiencies in the prequalification requirements being met by the Applicant to the satisfaction of the Employer, before submitting a bid. Upon full compliance with the prequalification requirements, other prequalified applicants will be notified accordingly.

### One Bid per bidder

10.3 A qualified firm or a member of a qualified joint venture may participate in only one bid for the contract. If a firm submits more than one bid, singly or in joint venture, all bids including that firm will be rejected. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one bid.

### Bid Security

10.4 Bidders will be required to provide bid security in the form and amount indicated in the bidding documents. The successful bidder will be required to provide performance security in the form and amount indicated in the bidding documents.

### Changes after Prequalification

10.5 Any change in the formation of an Applicant after being prequalified and invited to bid shall be subject to written approval of the Employer prior to the deadline for submission of bids. Any such change shall be submitted to the Employer not later than fourteen (14) days after the date of the Invitation to Bid. Such approval shall be denied if as a consequence of any change:

- a. an individual firm, or a joint venture as a whole, or any individual member of the JV fails to meet any of the collective or individual qualifying requirements;

- b. the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- c. in the opinion of the Employer, a substantial reduction in competition may result.

**Employer's Rights**

10.6 The Employer reserves the right to take the following actions, and shall not be liable for any such actions:

- a. amend the scope and cost of any contract to be bid under this project, in which event bids will be invited only from those applicants who meet the resulting amended Prequalification requirements;
- b. reject or accept any Prequalification application, and/or any late application; and
- c. cancel the Prequalification process and reject all applications.

## Section III Particular Instructions to Applicants (PITA)

These particular instructions and related Information Forms are intended to complement, amend, or supplement the provisions in the GITA. In the event of conflict or ambiguity, the provisions in the PITA shall prevail over those in the GITA.

<b>GITA Clause Reference</b>	
1.1	<p><b><u>Source of Funds</u></b>            MBJCL has already signed a loan agreement for the debt portion required for the project with Employees Provident Fund (EPF) and equity investment will be made from CHPCL, NEA, local promoters and general public. MBJCL intends to apply this fund or a part of the fund to the eligible payments under the contract(s) for which this prequalification is issued.</p>
1.2	<p><b><u>The Employer</u></b>            MADHYA BHOTEKOSHI JALAVIDYUT COMPANY LIMITED            Kathmandu, Nepal            Post Box No.: 23599            Tel. No.: 977-1-4721641/4721642            Fax No.: 977-1-4721643            Email: admin@mbjcl.com.np</p> <p><b><u>Name of Project</u></b>  <b>MIDDLE BHOTEKOSHI HYDROELECTRIC PROJECT</b></p> <p><b>Location: Sindhupalchowk District, Bagmati Zone, Nepal</b></p> <p><b><u>Scope of Work</u></b>            Contract Identification No.: MBJCL/MBKHEP/069/70/EM-1</p> <p><b><u>Title:</u></b> Lot 2: Electromechanical Works            (Design, Manufacture, Supply, Installation, Testing and Commissioning of Electromechanical Equipment)</p> <p><b><u>The Works:</u></b> The Electromechanical Works in the Lot 2 Contract include, but not limited to the following main components:</p> <p><b><u>Mechanical Equipment:</u></b></p> <ul style="list-style-type: none"> <li>- Three sets of Francis turbines with rated output 34 MW each</li> <li>- Three sets of turbine governors</li> <li>- Three sets of spherical type main inlet valves</li> <li>- Auxiliary systems (cooling water system, hydraulic oil system, compressed air system etc.)</li> <li>- Ancillaries (drainage and dewatering system, hoisting devices, oil filtration plant, compressed air system, mechanical workshop equipment, power station elevator/s, diesel generating units, fire fighting system, HVAC system etc.)</li> </ul> <p><b><u>Electrical Equipment:</u></b></p>

	<ul style="list-style-type: none"> <li>- Three sets of generators, rated output 40 MVA each</li> <li>- Three sets of excitation system,</li> <li>- Generator main circuits and 11 kV switchgear</li> <li>- Ten sets of single-phase main transformers with rated output 13.5 MVA each</li> <li>- One set of 220 kV gas insulated switchgear with 220 kV Cable Systems</li> <li>- MV/LV Switchgear (AC auxiliary supply system, Isolation and station transformers, DC and UPS system etc.)</li> <li>- Automation, control and protection system</li> <li>- Other auxiliary system (communication system, security system, lighting and small power installation, electrical workshop equipment, etc.)</li> <li>- Earthing and lightning protection system</li> </ul>
1.3	<p><b><u>Slice and Package</u></b> Not Applicable</p>
1.4	<p><b><u>Bid Invitation</u></b> Expected date of Invitation for Bids: June 2013</p>
1.5	<p><b><u>Type of Contract</u></b> Lot No 2: Electromechanical Works will be accomplished in Plant and Design Build (P&amp;DB) contract model.</p> <p><b><u>Bidding Documents:</u></b> The Type of Standard Bidding Document to be applied for Lot 2 will be FIDIC Conditions of Contracts for Plant and Design-Build.</p> <p><b><u>Method of payment:</u></b> Installment payments related to achieved milestones (progress).</p> <p><b><u>Time for completion:</u></b> Required date of completion is December 2016</p>
1.6	<p><b><u>Site Information:</u></b> See Annex-1 to the PITA for the referenced contract</p>
3.	<p><b><u>Eligibility of Countries and bidders:</u></b></p> <p><b><u>Add followings at the end of the paragraph on Sub-clause 3.1:</u></b></p> <p>"<u>Local Agent:</u> Foreign bidder/s shall declare a Local Agent, if any, and accordingly shall submit documents as per Information Form 11 (IF 11)."</p> <p><b><u>Replace Sub-clause 3.3 in its entirety with the following:</u></b></p> <p>A firm declared ineligible by the GoN, NEA, CHPCL and its sister companies shall be ineligible in order to participate in this Prequalification process.</p> <p>The firms debarred or black listed by the World Bank and/or Asian development Bank shall also be ineligible in this PQ process.</p> <p><b><u>Add the following Sub-clauses</u></b></p>

	<p><b>3.4 Conflict of Interest</b> An Applicant shall not have a conflict of interest. Applicants found to have a conflict of interest shall be disqualified. An Applicant may be considered to be in a conflict of interest with one or more parties in this prequalification process, if:</p> <ul style="list-style-type: none"> <li>a they have controlling partners in common; or</li> <li>b they receive or have received any direct or indirect subsidy from any of them; or</li> <li>c they have the same legal representative for purposes of this prequalification; or</li> <li>d they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Applicant, or influence the decisions of the Employer regarding this prequalification process; or</li> <li>e an Applicant participates in more than one application in this prequalification process. Participation by an Applicant in more than one application will result in the disqualification of all applications in which the party is involved. However, this does not limit the inclusion of the same sub Contractor, not otherwise participating as an applicant, in more than one application ; or</li> <li>f an Applicant or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Contract that is the subject of the Prequalification process; or</li> <li>g an Applicant or any of its affiliates has been hired (or is proposed to be hired) by the Employer as Engineer for the Contract.</li> <li>h the local associate/ agent is involved or proposed to be involved directly or indirectly both in this Electromechanical Works and Consulting services of this project.</li> </ul> <p><b>3.5 Government Owned Enterprises</b> Enterprises owned by Government shall be eligible only if they can establish that they are legally and financially autonomous and operate under commercial law, and that they are not dependent agencies of the Borrower.</p>
4	<p><b>Qualification Criteria</b> Refer Section VI Qualifying and Evaluation Criteria.</p> <p>In the event of discrepancies of the information between Qualifying and Evaluation Criteria and PITA, the information described under Qualifying and Evaluation Criteria shall prevail.</p>
4.1	<p><b>I. Information Forms:</b> See Sections V</p> <p><b>II. Experience:</b></p> <ul style="list-style-type: none"> <li>a. Any subsidiary company shall pre-qualify as an independent applicant for this work for which an applicant shall produce including its own experience, experience and credentials of Parent Company, in which case experience and credentials of Parent Company shall also be considered for Prequalification of such applicant provided that Applicant must enclose the documentary evidence of having the support of and access to the assets and resources of a Parent Company for this work package through a Corporate Guarantee or any other authorized documents to the satisfaction of the employer. Past experience and financial capacity of such Parent company shall be considered for Prequalification of such Subsidiary company. Parent Company's</li> </ul>



	<p>experience shall mean the experience executed directly by the Parent Company. Subsidiary company must be in business operation at least for three years for the consideration of experience of Parent Company.</p> <p>b. In case of a Applicant is a Company, formed after merger and/or acquisition of other companies, past experience and other antecedents of the merged/acquired companies will be considered for qualification of such Applicant provided such Applicant's continues to own the requisite assets and resources of the merged/ acquired companies relevant to the claimed experience.</p> <p>c. In case of a Applicant is a Company, formed after demerger of another company, past experiences and other antecedents of source company (another company) will be considered for qualification of such Applicant provided the Applicant company is entitled to use such past experiences and other antecedents of source company as awarded by a competent authority and evidence to such entitlement is produced along with the Prequalification document.</p>
4.2	<p><b><u>Nominated Subcontracting</u></b> This Sub-Clause is “<b>NOT APPLICABLE</b>”</p>
4.3	<p><b><u>Subcontracting by Applicant:</u></b> Information to be provided if the Applicant intends to subcontract more than 10 percent of the Applicant's approximated Bid Price and/or, for any specialized subcontracting.</p>
4.4	<p><b><u>Specialist Subcontracting is done for specialized elements of the works which shall be any of the four but at the most three of the following:</u></b></p> <p>a. Design, Manufacture, Supply, Erection, Testing and Commissioning for Francis Turbine. b. Design, Manufacture, Supply, Erection, Testing and Commissioning for Generator. c. Design, Manufacture, Supply, Erection, Testing and Commissioning for Transformer. d. Design, Manufacture, Supply, Erection, Testing and Commissioning for GIS.</p> <p>The Applicant must execute at least one of (a) or (b) of the above mentioned specialized elements of the Works by himself as per the qualification criteria.</p> <p>Information to be provided as per IF 3, IF 3A, IF 3B, IF 3C, IF 3D, IF 6, IF 6A, IF 6C1, IF 6C2, IF 6D, IF 8, IF 10.</p>
4.5	<p><b><u>Acceptable substitutes</u></b> Not Applicable</p>
4.7	<p><b><u>General Experience</u></b> “While calculating the Turnover of the National Contractors for the past years the turnover amount shall be calculated in present value by deducting the VAT amount and then applying the inflation rate/index of the Nepal Rastra Bank. For calculating the average annual turnover, the turnover of the best three years out of last ten year's turnover shall be considered.”</p> <p>Last paragraph as stated above of this Sub-clause is deleted.</p> <p>The Applicant shall provide evidence as mentioned in Section VI: Qualifying and Evaluation Criteria.</p>
4.8	<p><b><u>a. Particular Experience</u></b> As mentioned in Section VI: Qualifying and Evaluation Criteria.</p>

	<p><b><u>b. Minimum key production rates:</u></b></p> <p>1. "Not Applicable"</p>
4.9	<p><b><u>Financial Capabilities</u></b> (Working capital of last financial year + line of credit) ≥ US Dollar 6 Million</p>
4.10	<p><b><u>Adequate Source of Finance</u></b> Minimum Bid Capacity (BC) to meet cash flow requirement for this and other contract commitment through the leveraged value of the applicant's available resources : Where, Bid Capacity (BC) = 5 × total financial resources - 40% of total contract value of current commitments (should be greater than or equal to the amount as mentioned in Section VI: Qualifying and Evaluation Criteria.)  Total financial resources = Working capital + line of credit</p>
4.11	<p><b><u>Applicant's Financial Situation and Audited Balance Sheets</u></b> As mentioned in Section VI: Qualifying and Evaluation Criteria.</p>
4.12	<p><b><u>Personnel Capabilities</u></b> The Applicant shall provide details of the proposed personnel and their experience records in the relevant Information Forms IF 6, IF 6C1 and IF 6C2. The proposed personnel shall not be replaced without prior approval of the Employer.</p>
4.15	<p><b><u>Slice and Package</u></b> Not Applicable</p>
4.16	<p><b><u>Clarifications of Applications</u></b>  <u>Add the following after the paragraph:</u>  If discrepancies are found in information submitted, the application shall be considered unsatisfactory, and the applicant will not be eligible to bid until all discrepancies have been resolved. Failure by an applicant to respond or provide clarification of any discrepancies within fourteen (14) days of having received a request to do so shall disqualify the application from further consideration.</p>
5.2	<p><b><u>Qualification Criteria</u></b> Refer Section VI: Qualifying and Evaluation Criteria. Altogether, the JV partners shall meet 100% of qualification requirements.</p>
5.3	<p><b><u>Partner in charge</u></b> Partner in charge and Lead Partner shall have the same meaning.</p>
5.4	<p><b><u>Partner Limitation</u></b> The number of partners in JVs in this contract is limited to two (2) and share of each partner in the Joint Venture shall not be less than 25%, and the share of partner-in-charge (lead partner) shall be at least 51%.</p>
5.6	<p><b><u>Joint Venture Agreement</u></b>  <u>Add the following after the paragraph:</u>  The joint venture agreement of the Applicant, or the Letter of Intent to execute a JVA in the event of a successful bid, must be submitted in English Language. If a JV is selected for award of contract, it must be registered for Permanent Account Number (PAN) and Value Added Tax (VAT) in the Internal Revenue Office of Nepal.</p>
5.7	<p><b><u>Dissolution of Joint Venture</u></b>  In case of dissolution of a Joint Venture prior to the submission of the bid, such Applicant shall</p>

	be disqualified from participating in the bid.
6.	<b><u>Domestic Bidder Price Preference</u></b> Not Applicable
7.1	<b><u>Requests for Clarification</u></b> A Pre-Application meeting for any clarification of the Prequalification documents shall be held at the Employer's premises on 30 <sup>th</sup> day of the notice published for Prequalification. Address: Managing Director Middle Bhotekoshi Hydroelectric Project Madhya Bhotekoshi Jalavidyut Company Limited Kathmandu, Nepal Tel. No.: 977-1-4721641, 4721642 Fax No.: 977-1-4721643 Email: <a href="mailto:admin@mbjcl.com.np">admin@mbjcl.com.np</a>
8.1 and 8.3	<b><u>Amendment Prequalification document</u></b> An amendment to the Prequalification document shall not be issued later than 7 days prior to the last submission date.
9.2	<b><u>Delivery</u></b> <b><u>Address for the Submission of Applications:</u></b> Managing Director Middle Bhotekoshi Hydroelectric Project Madhya Bhotekoshi Jalavidyut Company Limited Kathmandu, Nepal Tel. No.: 977-1-4721641, 4721642 Fax No.: 977-1-4721643 Email: <a href="mailto:admin@mbjcl.com.np">admin@mbjcl.com.np</a> <b><u>Date and time for Submission:</u></b> As specified in the 'Invitation for Prequalification Notice' or as extended and notified to the perspective Applicants. <b><u>Envelope Marking:</u></b> "Application to Prequalify as Contractor for Lot 2: Electromechanical Works (Design, manufacture, supply, installation, testing and commissioning of Electromechanical Equipment) " <b><u>Disqualification:</u></b> If the application is submitted in the name other than the name for which Prequalification document was purchased, such application shall be disqualified from Prequalification process.
9.4	<b><u>Language:</u></b> English If the information provided in the document is in a language other than English then the Applicant shall submit its English translation duly authenticated in English language for each and every such copy by notary agencies of country of the Applicant.
9.5	<b><u>Lack of information:</u></b> Delete the following sentence from the end of the paragraph: "If an Applicant cannot submit a particular document as stated in the PQ document then an equivalent document submitted by the Applicant may be considered for evaluation."
9.7	<b><u>Add the following Sub-clause after Sub-clause 9.6</u></b>

	<p><b><u>Sub-clause 9.7 Opening of Applications:</u></b> The Employer will open the Applications in the presence of the Applicants' representatives, who choose to attend at the time and in the place specified as below. The opening process shall not be hindered even if Applicants' representatives are not present. The Employer shall prepare a record of the opening of applications that shall include, as a minimum, the name of the Applicant.</p> <p><b><u>Time and Date of Prequalification Applications Opening:</u></b> As specified in the 'Invitation for Prequalification Notice' or as extended and notified to the perspective Applicants</p> <p><b><u>Place of Opening:</u></b> Office of MBJCL, Kathmandu, Nepal</p>
10.1	<p><b><u>Employer's Notification</u></b> Time period from the last date for submission of applications: 60 (Sixty) days</p>
10.2	<p><b><u>Conditional Prequalification</u></b> Not Applicable</p>
10.3	<p><b><u>Sub-clause 10.3 of GITA is replaced in its entirety with the following:</u></b> Only firms and joint ventures that have been prequalified under this procedure may submit a bid. A firm shall submit only one bid in the same bidding process, either individually as a bidder or as a partner of a joint venture. No firm can be a specialist subcontractor while submitting a bid individually or as a partner of a joint venture in the same bidding process. A firm, if acting in the capacity of specialist subcontractor in any bid, may participate in more than one bid, but only in that capacity. A bidder, who submits or participates in more than one bid, will cause all the proposals, in which the bidder has participated, to be disqualified.</p>
10.5	<p><b><u>Changes after Prequalification</u></b> Any change in the formation of an Applicant after being prequalified is not allowed except as in the following cases: i. PITA Sub-clause 4.1 II (b)</p>
10.6	<p><b><u>Employer's Rights</u></b> Sub-clause 10.6 of GITA is replaced in its entirety with the following: The Employer reserves the right to take the following actions: a. amend the scope and cost of any contract to be bid under this project; b. reject any prequalification application not duly submitted c. cancel the prequalification process and reject all applications.</p>
<b>Add Clause 11 Evaluation of Applications after Clause 10.</b>	
11	<p><b><u>Evaluation of Applications</u></b> <b><u>Confidentiality</u></b></p>
	<p>11.1 Information relating to the evaluation of applications, and recommendation for Prequalification, shall not be disclosed to Applicants or any other persons not officially concerned with such process until the notification of Prequalification is made to all Applicants.</p>
	<p>11.2 From the deadline for submission of applications to the time of notification of the results</p>

	of the Prequalification in accordance with GITA Sub-clause 10.1, any Applicant shall not contact the Employer on any matter related to the Prequalification process unless Employer requests to Applicant as per GITA Sub-clause 11.3.
11.3	If discrepancies are found in information submitted by applicants, the application shall be considered unsatisfactory, and the applicant will not be eligible for Prequalification process until all discrepancies have been satisfactorily explained or resolved. Failure by an applicant to respond or provide clarification of any discrepancy within the stated period of time as per GITA Sub-clause 4.16 may lead to disqualification of the Applicant.

### **Annex to PITA**

Annex - 1: General and Specific Information of Middle Bhotekoshi Hydroelectric Project

## Section IV Letter of Application

## Letter of Application

Date:

To: The Managing Director

Madhya Bhotekoshi Jalavidyut Company Limited

Kathmandu, Nepal

Phone No.: 977-1-4721641, 4721642

Fax No. : 977-1-4721643

E-mail: admin@mbjcl.com.np

1. Being duly authorized to represent and act on behalf of \_\_\_\_\_ (hereinafter referred to as “the Applicant”), and having reviewed and fully understood all of the prequalification requirements and information provided, the undersigned hereby applies for prequalification to bid on the contract indicated below:

Contract Reference	Contract Title
MBJCL/MBKHEP/069/70/EM-1	Lot 2: Electromechanical Works (Design, Manufacture, Supply, Installation, Testing and Commissioning of Electromechanical Equipment)

2. Attached to this letter are copies of original documents defining<sup>1</sup>:
- the Applicant's legal status;
  - the principal place of business; and
  - the place of incorporation (for corporations), or place of registration and the nationality of the owners (for Applicants that are partnerships or individually owned firms).
3. With reference to GITA Sub-clause 4.3, it is our intention to subcontract approximately \_\_\_\_\_ percentage of the Bid/Contract Price, details of which are provided herein.
4. Your Agency and its authorized representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents, and information submitted in connection with this application, and to seek clarification from our Financing Agencies and Clients regarding any financial and technical aspects. This Letter of Application will also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information to provide such information deemed necessary and as requested by yourselves to verify statements and information provided in this application, such as the resources, experience, and competence of the Applicant.
5. Your Agency and its authorized representatives may contact the following persons for further information<sup>2</sup>:

General and managerial inquiries	
Contact 1	Address and communication facilities
Contact 2	Address and communication facilities

Personnel inquiries	
Contact 1	Address and communication facilities
Contact 2	Address and communication facilities

<sup>1</sup> For applications by joint ventures, all the information requested in the prequalification documents is to be provided for the joint venture, if it already exists and for each party to the joint venture separately. The lead partner should be clearly identified. Each partner in the joint venture shall sign the letter.

<sup>2</sup> Applications by joint ventures should provide on a separate sheet equivalent information for each party to the application

Technical inquiries	
Contact 1	Address and communication facilities
Contact 2	Address and communication facilities

Financial inquiries	
Contact 1	Address and communication facilities
Contact 2	Address and communication facilities

6. This application is made with the full understanding that:
- bids by Applicants will be subject to verification of all information submitted at the time of bidding;
  - your Agency reserves the right to:
    - amend the scope and value of any contracts to be bid under this project; in which event, bids will be invited only from those Applicants who meet the resulting amended Prequalification requirements; and
    - reject or accept any application, cancel the Prequalification process, or reject all applications.
  - your Agency shall not be liable for any such actions under 6 (b) above.
7. Appended to this application, we give details of the participation of each party, including capital contribution and profit/loss agreements, in the joint venture<sup>3</sup> or association. We also specify the financial commitment in terms of the percentage of the value of the <each> contract, and the responsibilities for execution of the <each> contract.
8. We confirm that if we bid, that bid, as well as any resulting contract, will be:
- signed so as to legally bind all partners, jointly and severally; and
  - submitted with a joint venture agreement notarized by public notary, providing the joint and several liability of all partners in the event the contract is awarded to us.
9. We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with PITA 3.4.,
10. We are not a government owned entity / We are a government owned entity but meet the requirements of PITA 3.5
11. The undersigned declare that the statements made and the information provided in the duly completed application are complete, true, and correct in every detail.

Signed	Signed
Name	Name
For and on behalf of (name of Applicant or Partner-in-charge/lead partner of a joint venture)	For and on behalf of (name of partner)

<sup>3</sup> Applicants who are not joint ventures should delete paras 7 and 8 and initial the deletions. The attention of Applicants who are JVs is drawn to GITA Sub-clause 5.6 regarding Letters of intent.



## Section V Information Forms

(Reference Sub-Clause 4.1 of the GITA)

1. The following Information Forms shall be filled in by the Applicants for Prequalification:

- Information Form 1 (IF 1) : General Information
- Information Form 2 (IF 2) : General Experience Record (Design, Manufacture, Supply, Installation, Testing and Commissioning of Electromechanical Equipment)
- Information Form 2A (IF 2A) : Joint Venture Summary
- Information Form 3 : General Experience -Electromechanical Equipment
- Information Form 3A (IF 3A) : Specific Experience – Francis Turbines
- Information Form 3B (IF 3B) : Specific Experience – Generators
- Information Form 3C (IF 3C) : Specific Experience – Transformers
- Information Form 3D (IF 3D) : Specific Experience – Gas Insulated Switchgear
- Information Form 4 (IF 4) : Summary Sheet: Current Contract Commitments / Works in Progress
- Information Form 5 (IF 5) : Financial Capabilities
- Information Form 6 (IF 6) : Personnel Capabilities
- Information Form 6A (IF 6A) : Candidate Summary
- Information Form 6B (IF 6B) : Site management for transportation, installation, testing and commissioning
- Information Form 6C1 (IF 6C1) : Personnel Capabilities: Staffs proposed for execution of the Works
- Information Form 6C2 (IF 6C2) : Personnel Capabilities: Staffs proposed for execution of the Works (Specialist Sub-contractor)
- Information Form 6D (IF 6D) : Specialist Sub-contractors (Applicant may propose the alternate Specialist Sub-contractors)
- Information Form 7 (IF 7) : Equipment Capabilities
- Information Form 8 (IF 8) : Subcontractor
- Information Form 9 (IF 9) : Litigation History
- Information Form 10 (IF 10) : Manufacturer/ Specialist Sub-contractor’s Authorization Form
- Information Form 11 (IF 11) : Declaration of Local Agent
- Information Form 12 (IF 12) : Conflict of Interest
- Information Form 13 (IF 13) : Letter of Commitment

2. If necessary, additional sheets may be added to the forms.

3. Some of the forms will require attachments. Such attachments should be clearly marked as follows: Attachment (i) to Information Form 1, Attachment (ii) to Information Form 1, etc.

4. MBJCL may request all the Applicants to provide electronic copies (soft copies) of all the information forms and attachments submitted with the Prequalification Applications for evaluation purpose only.

INFORMATION FORM 1 (IF 1)

PAGE \_\_ OF \_\_ PAGES

**General Information**

All individual firms and each partner of a joint venture applying for prequalification are required to complete the information in this form. Information on nationality should be provided for all owners or Applicants that are partnerships or individually owned firms.

If the Applicant intends to use specialist subcontractors for specialized elements of the Works (reference Sub-Clause 4.4 of the GITA), the following information should also be supplied for such subcontractor(s), together with the information in Forms 3, 3A, 3B, 3C and 3D.

1.	Name of firm	
2.	Head office address	
3.	Telephone	Contact
4.	Fax	Email
5.	Place of incorporation / registration	Year of incorporation / registration

Nationality of owners <sup>1</sup>		
	Name	Nationality
1.		
2.		
3.		
4.		
5.		

\_\_\_\_\_  
(Place and Date)

\_\_\_\_\_  
(Representative)

1. To be completed by all owners of partnerships or individually owned firms.

INFORMATION FORM 2 (IF 2)

PAGE \_\_ OF \_\_ PAGES

**General Experience Record (Design, Manufacture, Supply, Installation, Testing and Commissioning of Electromechanical Equipment) (ref. GITA Sub-Clause 4.7)**

Name of Applicant or partner of a joint venture
---

All individual firms and all partners of a joint venture are required to complete the information in this form. The information supplied should be the annual turnover of the Applicant (or each member of a joint venture), in terms of the amounts billed to clients for each year for work in progress or completed, in US Dollar. The annual periods should be calendar years, with partial accounting for the year up to the date of submission of applications.

A brief note on each contract should be appended, describing main features of the work, duration and amount of contract, managerial arrangements, employer, and other relevant details.

Use a separate sheet for each partner of a joint venture.

Applicants should not enclose testimonials, certificates, and publicity material with their applications; they will not be taken into account in the evaluation of qualifications.

Year	USD
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

---

 (Place and Date)

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 (Representative)

INFORMATION FORM 2A (IF 2A)

PAGE \_\_ OF \_\_ PAGES

**Joint Venture Summary**

Names of the partners of a joint venture and Percentage (%)
1. Partner in charge
2. Partner
3. Partner

Total value of annual manufacture/ construction contract turnover, in terms of work billed to clients, in US Dollar equivalent, converted at the rate of exchange at the end of the period reported:

Annual turnover data (design, manufacture, installation, commissioning) : US Dollar				
Year	1.Partner in charge	2. Partner	3. Partner	Total
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

---

 (Place and Date)

---

 (Representative)

INFORMATION FORM 3 (IF 3)

PAGE \_\_ OF \_\_ PAGES

**GENERAL EXPERIENCE – ELECTROMECHANICAL EQUIPMENT (ref. GITA Sub-Clauses 4.4 and 4.8a)**

Name of Applicant or partner of a joint venture or specialist subcontractor
---

The Information Form 3A, Experience Record, shall be provided. Applicants may reproduce the forms on larger sheets of paper if necessary to provide space for the requested information.

The experience record is divided into General Experience and Specific Experience. All projects referenced in the Specific Experience tables must be identified, described and assigned a sequential reference number in the General Experience tables even if they do not satisfy the monetary value criteria for the General tables.

Sequential reference numbers should be used to cross-reference specific experience to the projects listed in the General Experience tables.

The following guidelines should be followed in completing IF 3A, General Experience Record.

**Column 1. Sequence Number**

Enter in the first column of IF3A, sequential reference numbers for each project. These numbers should be used as cross-reference numbers to projects shown in the specific experience tables and should also be shown prominently on all client reference documents, project data sheets and other attachments relevant to the project.

**Column 2. Project Name**

Enter the commonly used name for the project.

**Column 3. Owners Name**

Enter the name of the organization or agency for whom the contract was performed.

**Column 4. Country**

Enter the name of the country in which the equipment was delivered and installed.

**Columns 5. Description of Work**

Enter a condensed description of the project.

For each project used as a reference in the Specific Experience tables include as a separate attachment a project data sheet describing the principal features of the project including the information listed below (as applicable). If the Applicant was a subcontractor or joint venture partner indicate on the data sheet the scope of work for which the Applicant was responsible. Use Sequence numbers to cross-reference data sheets to projects listed in IF 3A.

**Project Information:**

Name of project:

Location: (Province, Country)

Powerhouse location: (surface, underground)

Nominal net head: (m)

Number of generating units: ( $n_u$ )

Nominal turbine water flow and output: ( $n_u \times m^3/s$ ), ( $n_u \times MW$ )

Turbines, type and characteristics: (pelton, francis, kaplan-, pump etc), (rpm), (for pelton, number of nozzles),(describe special design features implemented for controlling sediment erosion).

Generator characteristics: ( $n_u \times MVA$ ), (voltage kV)

Transformer hall location: (surface, underground)

Transformer type: (three-phase/ single-phase)

Number of Transformers: ( $n_t$ )

Nominal Transformer Output: ( $n_t \times MVA$ )

Transformer outgoing voltage: (kV)

Type of switchgear: (traditional/ gas insulated)

High voltage cables: (three-phase/ single-phase) (number of circuits)

Length of cables: (Distance from transformers to cable terminations, (m))

#### Column 6.Contract Value Total

Enter the total value of the contract in equivalent US Dollar.

#### Column 7.Contract Value Applicant Share

If the Applicant was a subcontractor, or a partner in a joint venture, enter the value of the work for which the Applicant was directly responsible. Enter the value in equivalent US Dollar.

#### Column 8 and 9. Contract Period

Enter the dates of contract award and substantial completion.

#### Column 10. Special Site Conditions

Enter appropriate codes from the following table, which describe special conditions encountered on the reference project:

- A. Remote project site with undeveloped communications
- B. Long supply lines requiring ocean transport, port clearances, long rail and road haulage for all major shipments
- C. Extensive training and employment of local labor force.

Information concerning special site conditions should be included in the relevant project data sheet (Refer Column 5 above).

#### Column 11. Client Reference

For all projects referenced in the Specific Experience tables provide, as a separate attachment, a client reference confirming satisfactory completion.

Client references should:

- (a) be written in English on the letterhead of the client organization. If the references are in other languages, it shall be accompanied by an accurate translation of its relevant passages into the English language duly authenticated by notary agencies or the nationally/internationally recognized translating body/agency (ies).
- (b) include the name, title and signature of the individual providing the reference and



(c) include the address and telephone number of the client organization.

In the event the project Owner and the Client are different parties, include a statement establishing the authority of the Client to provide a reference.

Use sequential reference numbers to cross-reference client references to projects.

INFORMATION FORM 3 (IF 3)

PAGE\_\_OF\_\_PAGES

**GENERAL EXPERIENCE – ELECTROMECHANICAL EQUIPMENT**

List all Electromechanical Works Contracts in hydroelectric power plant generating equipment executed during the last fifteen (15) years:

SEQ. REF. NO. (1)	PROJECT NAME (2)	OWNER NAME (3)	COUNTRY (4)	DESCRIPTION OF WORKS (5)	CONTRACT VALUE (US DOLLAR MILLION)		CONTRACT PERIOD		SPECIAL SITE CONDITIONS (10)	REF. ATTACHED (11)
					TOTAL (6)	APPLICANT SHARE (7)	START (8)	COMPLETE (9)		

(Place and Date)

(Representative)

**Note: This form must be completed for Applicant, each partner of joint venture and each specialist subcontractor.**

INFORMATION FORM 3A (IF 3A)

PAGE\_\_OF\_\_PAGES

**SPECIFIC EXPERIENCE –FRANCIS TURBINES**List all Francis Turbines (nominal capacity  $\geq$  36MW) delivered by the Applicant during the last fifteen (15) years:

REF NO.	PROJECT NAME	IS A REFERENCE ATTACHED (Yes/No)	DESCRIPTION OF TURBINE					TIME FROM CONTRACT AWARD TO COMMISSIONING (MONTHS)	CONTRACT VALUES (US DOLLAR MILLIONS)	
			NUMBER OF TURBINES (Nos)	NOMINAL DESIGN HEAD (M)	NOMINAL DISCHARGE PER UNIT (M <sup>3</sup> /S)	RPM	NOMINAL OUTPUT PER UNIT (MW)		TOTAL	APPLICANT SHARE

(Place and Date)

(Representative)

**Note: This form must be completed for concerned party (Applicant or partner of joint venture or specialist subcontractor).**

INFORMATION FORM 3B (IF 3B)

PAGE\_\_OF\_\_PAGES

**SPECIFIC EXPERIENCE – GENERATORS**List all Generators (Nominal capacity  $\geq$  40MVA), delivered by the Applicant during the last fifteen (15) years:

REF. NO.	PROJECT NAME	IS A REFERENCE ATTACHED (Yes/No)	DESCRIPTION OF GENERATOR					TIME FROM CONTRACT AWARD TO COMMISSIONING (MONTHS)	CONTRACT VALUE (US DOLLAR MILLION)	
			NUMBER OF GENERATORS (Nos)	RPM	VOLTAGE (kV)	NOMINAL CAPACITY (MVA)	OTHER INFO		TOTAL	APPLICANT SHARE

(Place and Date)

(Representative)

**Note: This form must be completed for concerned party (Applicant or partner of joint venture or specialist subcontractor).**

INFORMATION FORM 3C (IF 3C)

PAGE\_\_OF\_\_PAGES

**SPECIFIC EXPERIENCE – TRANSFORMERS**List all Transformers for  $\geq 220\text{kV}$  with nominal capacity per unit  $\geq 40\text{MVA}$  supplied and installed by the Applicant during the last fifteen (15) years:

REF. NO.	PROJECT NAME	IS A REFERENCE ATTACHED (Yes/No)	DESCRIPTION OF EQUIPMENT					TIME FROM CONTRACT AWARD TO COMMISSIONING (MONTHS)	CONTRACT VALUE (US DOLLAR MILLION)	
			VOLTAGE RATIO (kV)	NUMBER OF TRANSFORMERS (Nos)	NOMINAL CAPACITY (MVA)	LOCATION	OTHER INFO		TOTAL	APPLICANT SHARE

(Place and Date)

(Representative)

**Note: This form must be completed for concerned party (Applicant or partner of joint venture or specialist subcontractor).**

INFORMATION FORM 3D (IF 3D)

PAGE\_\_OF\_\_PAGES

**SPECIFIC EXPERIENCE –GAS INSULATED SWITCHGEAR**List all Gas Insulated Switchgears for Voltage  $\geq 220$  kV supplied and installed by the Applicant during the last fifteen (15) years:

REF. NO.	PROJECT NAME	IS A REFERENCE ATTACHED (Yes/No)	DESCRIPTION OF EQUIPMENT					TIME FROM CONTRACT AWARD TO COMMISSIONING (MONTHS)	CONTRACT VALUE (US DOLLAR MILLION)	
			VOLTAGE (kV)	NUMBER OF BAYS (Nos)	NOMINAL CAPACITY (MVA)	LOCATION	OTHER INFO		TOTAL	APPLICANT SHARE

(Place and Date)

(Representative)

**Note: This form must be completed for concerned party (Applicant or partner of joint venture or specialist subcontractor).**

**Summary Sheet: Current Contract Commitments / Works in Progress**

Name of Applicant or partner of a joint venture
---

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

Name of contract	Employer, contact address/tel/fax/e-mail	Value of outstanding work (current US Dollar equivalent)	Estimated completion date	Average monthly invoicing over last six months (US Dollar equivalent)
1.				
2.				
3.				
4.				
5.				
etc.				

In accordance with GITA Sub-Clause 4.10, the Applicant shall provide evidence (in a similar manner to the requirements of Sub-Clause 4.9) to substantiate the adequacy of the sources of finance to meet the Applicant's cash flow requirements on the above contracts.

---

 (Place and Date)

---

 (Representative)

INFORMATION FORM 5 (IF 5)

PAGE\_\_OF\_\_PAGES

**Financial Capabilities**

Name of Applicant or partner of a joint venture
---

Applicants, including each partner of a joint venture, shall provide financial information to demonstrate that they meet the requirements stated in the PITA. Each Applicant or partner of a joint venture shall complete this form. If necessary, separate sheets shall be used to provide complete banker information. A copy of the audited balance sheets shall be attached.

Autonomous sub-divisions of parent conglomerate businesses shall submit financial information related only to the particular activities of the sub-division.

Banker	Name of Banker		
	Address of Banker		
	Telephone	Contact name and title	
	Fax	Email	

Summarize actual assets and liabilities in US Dollar equivalent (at the rates of exchange prevailing at the end of each year) for the previous five calendar years, or such period as stated in PITA Sub-clause 4.11. Based upon known commitments, summarize projected assets and liabilities in US Dollar equivalent for the next two calendar years, unless the withholding of such information by stock market listed public companies can be substantiated by the Applicant.

Financial information (US Dollar)	Actual: Previous five years					Projected: Next two years	
	5	4	3	2	1	1	2
1.Total assets							
2.Current assets							
3.Total liabilities							
4.Current liabilities							
5.Profit before taxes							
6.Profits after taxes							

---

 (Place and Date)

---

 (Representative)



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 indicated in PITA Sub-clause 4.9.

Source of financing*	Amount US Dollar
1.	
2.	
3.	
4.	

Attach audited financial statements—including, as a minimum, profit and loss account, balance sheet, and explanatory notes—for the period stated in PITA Sub-clause 4.11 (for the individual Applicant or each partner of a joint venture).

If audits are not required by the laws of Applicant's countries of origin, partnerships and firms owned by individuals may submit their balance sheets certified by a registered accountant, and supported by copies of tax returns.

\* *Attach the evidences where applicable.*

(Place and Date)

(Representative)

INFORMATION FORM (IF 6)

PAGE \_\_ OF \_\_ PAGES

**Personnel Capabilities: Staff proposed for execution of the works**  
(ref. PITA 4.12)

Name of Applicant or partner of a joint venture
---

For specific positions essential to contract implementation, Applicants should provide the names of at least two candidates qualified to meet the specified requirements stated for each position.

Proposed Position	Name(s)	Age	Nationality	Years of Exp.	Years with Firm	Highest Education	Year of Graduation	Relevant Experience
Project Manager								
Technical Expert - Electrical								
Technical Expert - Mechanical								
Chief Supervisor - Electrical								
Chief Supervisor - Mechanical								

NOTE: A summary of the professional experience of each key staff member over the years, in reverse chronological order, shall be attached. Indicate particular technical and managerial experience relevant to the project.

\_\_\_\_\_  
(Place and Date)

\_\_\_\_\_  
(Authorized Representative)

INFORMATION FORM (IF 6A)

PAGE \_\_ OF \_\_ PAGES

**Candidate Summary**

Name of Applicant
-------------------

Position	Candidate <input type="checkbox"/> Prime <input type="checkbox"/> Alternate	
Candidate information	Name of candidate	Date of birth
	Professional qualifications	
Present employment	Name of employer	
	Address of employer	
	Telephone	Contact (manager / personnel officer)
	Fax	Email
	Job title of candidate	Years with present employer

Summarize professional experience over the last twenty years, in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From	To	Company / Project / Position / Relevant technical and management experience

\_\_\_\_\_  
(Place and Date)

\_\_\_\_\_  
(Authorized Representative)

**Site management for transportation, installation, testing and commissioning**

Name of Applicant

**1. PROPOSED SITE ORGANIZATION**

**A. PRELIMINARY SITE ORGANIZATION CHART**

**B. NARRATIVE DESCRIPTION OF SITE ORGANIZATION CHART**

**C. DESCRIPTION OF RELATIONSHIP BETWEEN HEAD OFFICE AND SITE MANAGEMENT<sup>1</sup>**

\_\_\_\_\_  
(Place and Date)

\_\_\_\_\_  
(Representative)

<sup>1</sup>Indicate clearly which responsibility and what authority will be delegated to site management.

INFORMATION FORM 6C1 (IF 6C1)

PAGE \_\_ OF \_\_ PAGES

**Personnel Capabilities: Staff proposed for execution of the works**

(ref. PITA 4.12)

Name of Applicant

For specific positions essential to contract implementation, Applicant should provide the names of at least two candidates qualified to meet the specified requirements stated for each position. This form shall be filled in for the prime candidate as well as the alternative candidate.

Proposed Position	Name(s)	Age	Highest Education	Year of graduation	Years of Exp.	Years with Firm	Relevant Experience (Attach separate sheet if necessary)
Project Manager							
Design Incharge Mechanical / Electrical							
Quality Control Incharge							
Erection Incharge Mechanical / Electrical							
Commissioning Incharge Mechanical / Electrical							

NOTE: A summary of the professional experience of each key staff member over the last twenty years only shall be attached. Indicate particular technical and managerial experience relevant to the project.

(Place and Date)

(Representative)

INFORMATION FORM 6C2 (IF 6C2)

PAGE \_\_ OF \_\_ PAGES

**Personnel Capabilities: Staff proposed for execution of the works (Specialist Sub-contractor)**  
(ref. PITA 4.12)

Name of specialist subcontractor

For specific positions essential to contract implementation, Applicant should provide the names of at least two candidates qualified to meet the specified requirements stated for each position. This form shall be filled in for the prime candidate as well as the alternative candidate.

Proposed Position	Name(s)	Age	Natio nality	Years of Exp.	Years with Firm	Speciality	Relevant Experience (Attach separate sheet if necessary)
Design Incharge Mechanical / Electrical							
Quality Control Incharge							
Erection Incharge Mechanical / Electrical							
Commissioni ng Incharge Mechanical / Electrical							

## NOTE:

1. A summary of the professional experience of each key staff member over the last twenty years only shall be attached. Indicate particular technical and managerial experience relevant to the project.
2. This Information Form should be signed by an authorized person of the specialist subcontractor.

\_\_\_\_\_  
(Place and Date)

\_\_\_\_\_  
(Representative)

INFORMATION FORM 6D (IF 6D)

PAGE\_\_OF\_\_PAGES

**SPECIALIST SUBCONTRACTOR (APPLICANT MAY PROPOSE THE ALTERNATE SPECIALIST SUBCONTRACTORS)**

Work to be undertaken	Name(s) and address(es) of proposed specialist subcontractor (s)	Description, location of similar Works previously executed (Attach separate sheet if necessary)
1.	Main:	
	Alternate 1:	
	Alternate 2:	
2.	Main:	
	Alternate 1:	
	Alternate 2:	

3.	Main:	
	Alternate 1:	
	Alternate 2:	

---

 (Place and Date)

---

 (Representative)

**Note:** Specialist subcontractor, proposed as alternate should also fulfill the evaluation criteria. Alternate specialist subcontractor, not fulfilling the evaluation criteria shall not be considered in the bid by the successful Applicant.



INFORMATION FORM 7 (IF 7)

PAGE \_\_ OF \_\_ PAGES

**Equipment Capabilities**

Name of Applicant
-------------------

The Applicant shall provide adequate information to demonstrate clearly that it has the capability to meet the Loading/Unloading, Installation and Testing equipment. A separate Form (7) shall be prepared for each item of equipment proposed by the Applicant.

Item of equipment					
Equipment information	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%; padding: 5px;">iv. Name of manufacturer</td> <td style="padding: 5px;">Model and power rating</td> </tr> <tr> <td style="padding: 5px;">Capacity</td> <td style="padding: 5px;">v. Year of manufacture</td> </tr> </table>	iv. Name of manufacturer	Model and power rating	Capacity	v. Year of manufacture
iv. Name of manufacturer	Model and power rating				
Capacity	v. Year of manufacture				
Current status	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">vi. Current location</td> </tr> <tr> <td style="padding: 5px;">vii. Details of current commitments</td> </tr> </table>	vi. Current location	vii. Details of current commitments		
vi. Current location					
vii. Details of current commitments					
Source	viii. Indicate source of the equipment <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> To be purchased				

Following information about ownership to be provided for those equipment which is proposed to be rented or leased or purchased by the Applicant or partner.

Owner	<table style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="padding: 5px;">Name of owner</td> </tr> <tr> <td colspan="2" style="padding: 5px;">ix. Address of owner</td> </tr> <tr> <td style="padding: 5px;">x. Telephone</td> <td style="padding: 5px;">xi. Contact name and title</td> </tr> <tr> <td style="padding: 5px;">xii. Fax</td> <td style="padding: 5px;">xiii. Email</td> </tr> </table>	Name of owner		ix. Address of owner		x. Telephone	xi. Contact name and title	xii. Fax	xiii. Email
Name of owner									
ix. Address of owner									
x. Telephone	xi. Contact name and title								
xii. Fax	xiii. Email								
Agreements	xiv. Details of rental / lease / purchasing agreements specific to the project								

\_\_\_\_\_  
(Place and Date)

\_\_\_\_\_  
(Authorized Representative)

INFORMATION FORM 8 (IF 8)

PAGE\_\_OF\_\_PAGES

**SUBCONTRACTOR**

Works to be undertaken	Name of Subcontractor	Description, Location Similar Previously Executed
1.		
2.		
3.		
4.		
5.		
6.		

---

(Place and Date)

---

(Authorized Representative)



INFORMATION FORM 10 (IF 10)

PAGE \_\_ OF \_\_ PAGES

**MANUFACTURER/ SPECIALIST SUBCONTRACTOR'S AUTHORIZATION FORM**

To: \_\_\_\_\_ (Name of the Employer)

WHEREAS (Name of the manufacturer/specialist subcontractor) \_\_\_\_\_  
 \_\_\_\_\_ who are established and reputable manufactures of \_\_\_\_\_  
 \_\_\_\_\_ (name and/or description of the goods) having factories at \_\_\_\_\_  
 \_\_\_\_\_ (address of factory) do hereby authorize \_\_\_\_\_  
 \_\_\_\_\_ (name and address of Agent) to submit a Bid and Subsequently negotiate and sign the  
 contract with you against \_\_\_\_\_ (reference of the Invitation  
 of Qualification and Tender) for the above goods manufactured by us.

We hereby extend our full guarantee and warranty as per the Conditions of the Contract for the goods  
 offered for supply by the above firm against this Invitation for Qualification and Tender.

.....

(Signature for and on behalf of Manufacturer/Specialist subcontractor)

**Note:** This letter of authority should be on the letterhead of the Manufacturer and should be signed by a person  
 competent and having the power of attorney to bind the manufacturer. It should be included by the Applicant  
 in his Qualification and Tender Documents.

**Declaration of Local Agent**

Name of Applicant or partner of a joint venture

Declaration of local agent, if the Applicant appoints a local agent:

.....

Name and address of local agent:

.....

Amount of commission, currency of payment and method of payment:

.....

Other condition of agreement:

.....

Signed by:

\_\_\_\_\_

(Place and Date)

(Name in Print and signature of Applicant)

**Conflicts of Interest**

Name of Applicant or partner of a joint venture
---

Applicants, including each of the partners of a joint venture, shall declare that they have no Conflicts of Interest in accordance with PITA Sub-Clause 3.4.

PITA Sub-Clause 3.4	Conflicts of Interest (yes/No)
a	
b	
c	
d	
e	
f	
g	

\_\_\_\_\_  
(Place and Date)

\_\_\_\_\_  
(Authorized Representative)

INFORMATION FORM 13 (IF 13)

PAGE\_\_OF\_\_PAGES

[This letter of Commitment should be on the original letterhead of the Parent Company and should be signed by the person with the proper authority to sign documents that are binding for the Parent Company]

Date: \_\_\_\_\_

Contract Identification No.: \_\_\_\_\_

To:

**Madhya Bhotekoshi Jalavidyut Company Limited**  
 Maharajgunj, Kathmandu  
 Nepal

**Subject: Letter of Commitment**

We hereby confirm that *[Name of Subsidiary company]* having its registered office at *[address of subsidiary company]* is a subsidiary company of *[Name and address of Parent Company]*

We would further like to confirm that:

1. The above subsidiary is the designated company within the *[Name of Parent Company]* to bid, deal with and execute hydro projects in Nepal.
2. *[Name of Parent Company]* will not change the ownership of this subsidiary without informing you of such a change at least in due time.
3. For the fulfillment of its contractual obligations under the contracts for Middle Bhotekoshi Hydroelectric Project,
  - this company has full access to and right to use all resources, technology know-how and references of the *[Name of Parent Company]*
  - *"[Name of Subsidiary company]"* has the right to receive any technical support of its personal at the premises of *"[Name of Parent Company]"*.
4. *"[Name of Parent Company]"* will also be held responsible for the warranty and guarantee of goods designed, manufactured, supplied, installed, testing and commissioning by this subsidiary.
5. This letter of commitment and its possible legal consequences shall be subject to and construed in accordance with the laws of Government of Nepal.

Name \_\_\_\_\_

In the capacity of: \_\_\_\_\_

## Section VI Qualifying and Evaluation Criteria



## Section VI: Qualifying and Evaluation Criteria

In addition to the Qualification Requirements mentioned in the Invitation for Prequalification, General Instruction to Applicants (GITA) and Particular Instructions to Applicants (PITA), the Employer will use the criteria specified in this Section to evaluate and qualify Applicants. The method sets pass-fail criteria, which, if not met by the Applicant shall result in disqualification. The Applicant shall provide all the information requested in the forms included in Section V (Information Forms).

### 1. Eligibility Criteria

Before the detail evaluation, the Applicant's documents will be screened to determine their responsiveness and the eligibility.

#### 1.1 Applicants shall be disqualified, if they:

- do not submit notarized certificates of incorporation or registration to demonstrate that the Application has been legally registered for the last 10 (ten) years prior to the date of submission of the Application.
- do not submit the original Power of Attorney for the authorized person signing the Application Documents.
- are not from the eligible countries,
- are debarred or black listed by Government of Nepal (GoN), Nepal Electricity Authority (NEA), Chilime Hydropower Company Limited (CHPCL) and its sister Companies, World Bank (WB) or Asian Development Bank (ADB).

#### Note:

- i. For Joint Ventures, each partner shall fulfil above requirements.
- ii. If the incorporation or registration certificates are other than in English languages, then the Applicant shall submit its English translated copies. All copies of incorporation or registration certificates shall be duly authenticated in English by notary agencies of the Applicant's home country.

#### 1.2 Other Eligibility

Failure to fulfil any of the following requirements shall result in disqualification of the Applicants

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

##### 1.3.1 Conflicts of Interest

No conflicts of interest in accordance with PITA Sub-Clause 3.4	<b>must meet requirement</b>		<b>must meet requirement</b>	<b>must meet requirement</b>	Information Form IF 12
---	------------------------------	--	------------------------------	------------------------------	------------------------

##### 1.3.2 Government-owned Entity

Applicant required to meet conditions of PITA Sub-Clause 3.5.	<b>must meet requirement</b>		<b>must meet requirement</b>	<b>must meet requirement</b>	Letter of Application
---	------------------------------	--	------------------------------	------------------------------	-----------------------

## 2. Qualification Criteria:

### Qualification/ Experience of Parent Company:

Any subsidiary company which fulfils the requirements of PITA Clause 4.1 II can be an applicant provided it must enclose the documentary evidence from “Parent Company” of having the technical support of and access to the assets and resources through a letter of commitment (IF-13) that legally binds parent company also for this work package, to the satisfaction of the employer.

### 2.1 Pending Litigation

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

#### 2.1.1 Pending Litigation

All pending litigation shall be treated as resolved against the Applicant and so shall in total not represent more than Fifty (50) percent of the Applicant’s net worth.	<b>must meet requirement</b>		<b>must meet requirement</b>	<b>must meet requirement</b>	Information Form IF 9
--	------------------------------	--	------------------------------	------------------------------	-----------------------

### 2.2 Experience

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

#### 2.2.1 General Experience

The applicant shall be actively involved in Electro-Mechanical work contracts in Hydroelectric project for last ten (10) years.	<b>must meet requirement</b>		<b>must meet requirement</b>	<b>must meet requirement</b>	Information Form IF 3
---	------------------------------	--	------------------------------	------------------------------	-----------------------

#### 2.2.2 Particular Experience

**2.2.2 a) Contracts of Similar size and nature**

Criteria	Compliance Requirements			Documents
	Single Entity	Joint Venture		Submission Requirements
All Partners Combined		Lead Partner	Other Partner	
The applicant must have completed at least one (1) Electromechanical Works Contract in Hydroelectric Project with installed capacity $\geq$ 100MW as a Prime Contractor within the last ten (10) years.	<b>must meet requirement</b>		<b>must meet requirement</b>	Information Form IF 3
The applicant must have completed at least one (1) Electromechanical Works contract in Hydroelectric Project with a Contract amount equivalent to <b>USD 35 Million</b> or more (Single Contract) completed as Prime Contractor within the last ten (10) years.	<b>must meet requirement</b>		<b>must meet requirement</b>	Information Form IF 3

**Note:** Satisfactory completion and work experience shall be evidenced by the certificate issued by the client with proper contact address, telephone, email etc. If the references are other than in English languages, then the Applicant shall submit its English translated copies. All copies of the reference documents shall be duly authenticated in English by notary agencies of the Applicant's home country.

**2.2.2 (b) Experience in Key Activities**

The Applicant (Single Entity or Joint Venture partner(s)) shall fulfil the relevant condition in accordance with PITA 4.4. In case, the Applicant is subcontracting to any potential manufacturers for any of the Works specified hereunder, he/she shall submit a Letter of Authorization from the potential manufacturers, which shall fulfil the relevant requirements as per the qualification criteria below.

Criteria	Compliance Requirements			Documents
	Single Entity with or without specialist subcontractor(s)	Joint Venture with or without specialist subcontractor(s)		Submission Requirements
All Partners Combined		Lead Partner	Other Partner	
For contracts executed during the period stipulated in 2.2.2(a) above, a minimum experience in the following key activities:				

Criteria	Compliance Requirements			Documents	
For contracts executed during the period stipulated in 2.2.2(a) above, a minimum experience in the following key activities:	Single Entity with or without specialist subcontractor(s)	Joint Venture with or without specialist subcontractor(s)			Submission Requirements
		All Partners Combined	Lead Partner	Other Partner	
(i) Experience of successful Design, Manufacture, Supply, Installation, Testing and Commissioning of Francis Turbines of nominal output per unit $\geq 35\text{MW}$ and gross head $\geq 100\text{m}$ in at least two hydroelectric projects with satisfactory trouble free operation for more than two years as evidenced by respective user's certificate.	<b>must meet all requirements</b>	<b>must meet all requirements</b>			Information Form IF 3A
(ii) Experience of successful Design, Manufacture, Supply, Installation, Testing and Commissioning of Francis Turbines of nominal output per unit $\geq 35\text{MW}$ in at least two hydroelectric projects outside the country of the manufacturer with satisfactory trouble free operation for more than two years as evidenced by respective user's certificate.	<b>must meet all requirements</b>	<b>must meet all requirements</b>			Information Form IF 3A

Criteria	Compliance Requirements			Documents	
	Single Entity with or without specialist subcontractor(s)	Joint Venture with or without specialist subcontractor(s)			
For contracts executed during the period stipulated in 2.2.2(a) above, a minimum experience in the following key activities:		All Partners Combined	Lead Partner	Other Partner	Submission Requirements
(iii) Experience of successful Design, Manufacture, Supply, Installation, Testing and Commissioning of Generators for nominal output per unit $\geq 40$ MVA, in four hydroelectric projects of which at least two hydroelectric projects outside the country of the manufacturer with satisfactory trouble free operations for more than two years as evidenced by respective user's certificate.	<b>must meet all requirements</b>	<b>must meet all requirements</b>			Information Form IF 3B
(iv) Experience of successful design, manufacture, supply, installation, testing and commissioning of two lots of 220kV GIS (Gas Insulated Switchgear) system of which at least one lot of such equipment shall be supplied and installed outside the country of the manufacturer with satisfactory operation for more than two years as evidenced by respective user's certificate.	<b>must meet all requirements</b>	<b>must meet all requirements</b>			Information Form IF 3D

Criteria	Compliance Requirements			Documents	
For contracts executed during the period stipulated in 2.2.2(a) above, a minimum experience in the following key activities:	Single Entity with or without specialist subcontractor(s)	Joint Venture with or without specialist subcontractor(s)			Submission Requirements
		All Partners Combined	Lead Partner	Other Partner	
(v) Experience of successful Design, Manufacture, Supply, Installation, Testing and Commissioning of Step-up power transformers of secondary voltage $\geq$ 220kV, 40 MVA (three phase) capacity in two hydroelectric projects out of which at least one hydroelectric project outside the country of the manufacturer with satisfactory trouble free operations for more than two years as evidenced by respective user's certificate.	must meet all requirements	must meet all requirements			Information Form IF 3C

**Note:** Satisfactory completion and work experience (item number 2.2.2 (b) (i) to item number 2.2.2 (b) (vi) shall be evidenced by the Client's references in their letter head with proper contact address, telephone, email etc. If the references are other than in English languages, then the Applicant shall submit its English translated copies duly authenticated in English language by notary agencies of the Applicant's home country.

### 2.3 Financial Capabilities

Criteria	Compliance Requirements			Documents	
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Lead Partner	Other Partner	
2.3.1 Historical Financial Performance					

Submission of audited balance sheets and income statements for the last five (5) years to demonstrate the current soundness of the Applicant's financial position. As a minimum, the Applicant's net worth calculated as the difference between total assets and total liabilities should be positive in each year in last 3 years.	<b>must meet requirement</b>		<b>must meet requirement</b>	<b>must meet requirement</b>	Information Form IF 5 with attachment
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**Note:** If the balance sheet and profit and loss account of the Applicant are in language other than English, then the Applicant shall submit its English translated copy duly authenticated in English by notary agencies of the Applicant's home country.

### 2.3.2 Average Annual Turnover

Criteria	Compliance Requirements			Documents	
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Lead Partner	Other Partner	
Minimum average annual turnover of <b>US\$ 24 million</b> , calculated as total certified payments received for contracts in progress or completed within best three years out of last ten (10) financial years.	<b>must meet requirement</b>	<b>must meet requirement</b>	<b>must meet at least 51% of the requirement</b>	<b>must meet at least 25% of the requirement</b>	Information Form IF 5

**Note:**

The applicant has to submit the audited balance sheets of last ten years. If the balance sheet and profit and loss account of the Applicant are in language other than English, then the Applicant shall submit its English translated copy duly authenticated in English by notary agencies of the Applicant's home country.

### 2.3.3 Financial Resources

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

<p>The Applicant must demonstrate access to, or availability of, financial resources such as liquid assets, lines of credit, and other financial means, other than any contractual advance payments to meet the overall cash flow requirements for this contract and its current works commitment.</p> <ul style="list-style-type: none"> <li>▪ Total Financial Resources shall be <math>\geq</math> <b>US\$ 6 million</b></li> <li>▪ <b>Bid capacity</b> <math>\geq</math> US Dollar 35 million</li> </ul>	<p><b>must meet requirement</b></p>	<p><b>must meet requirement</b></p>	<p><b>must meet at least 51% of the requirement</b></p>	<p><b>must meet at least 25% of the requirement</b></p>	<p>Information Forms IF 4 and IF 5</p>
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### 2.4 Personnel Capabilities

The Applicant must demonstrate that the list of key personnel (as given below) who are qualified, experienced and capable of fluent English speaking and writing, to completing the installation, erection, adjustment and field tests, commissioning and operating instruction of the equipment.



S. No.	Position	Qualification
1	Project Manager	Master in Electrical/Mechanical Engineering or Bachelor in Electrical/Mechanical Engineering with Master in Business Administration (MBA) with 8 years experience OR Bachelor in Electrical/ Mechanical Engineering with 10 years experience
2	Design Incharge (Mechanical/Electrical)	Master in respective field of engineering with 8 years experience or Bachelor in respective field of engineering with 10 years experience
3	Quality Control Incharge (Mechanical/Electrical)	Master in respective field of engineering with 5 years experience or Bachelor in respective field of engineering with 7 years experience
4	Erection Incharge (Mechanical / Electrical)	Diploma or equivalent in respective field with 5 years experience in erection
5	Commissioning Incharge (Mechanical/Electrical)	Bachelor in respective field of engineering with 10 years experience in commissioning

**Note:** The numbers of personnels shown above are indicative only which shall be used solely for the purpose of evaluation of the Applicant. The Applicant must submit the Curriculum Vitae for the above mentioned personnel along with their commitment letters for this project. The Applicant, however, shall be responsible for the deployment of necessary personnels for timely completion of the project.

## ANNEX -1

### General and Specific Information of the Project

## Project Information

### 1. Introduction

The Madhya Bhotekoshi Jalavidyut Company Ltd. (MBJCL) is a public limited company established in 2010 AD to harness country's hydropower potential at a reasonable rate with the maximum utilization of resources (both financial and technical) available in the country. The Company is promoted by the Chilime Hydropower Company Ltd. who has successfully commissioned and brought in full operation of the Chilime Hydroelectric Power Plant of 22.1 MW capacity since June 2003 AD. MBJCL is planning to develop Middle Bhotekoshi Hydroelectric Project of capacity 102 MW. MBJCL has planned to manage its capital requirement from debt and equity under the debt: equity ratio of 50:50. Financial closure has been made for the debt part of the project from the Employees Provident Fund (EPF) under the long term loan agreement. Similarly, the equity part will be managed with 51% promoter share and 49% public share.

The study license of Middle Bhotekoshi Hydroelectric project was granted in the name of Madhya Bhotekoshi Jalavidyut Company Limited in 8<sup>th</sup> April 2011. The Middle Bhotekoshi Hydroelectric Project is located in Sindhupalchowk District of Bagmati Zone of the Central Development Region (Fig. MBK-INT 1.1). The project is accessible by Araniko Highway at a distance of 101 km towards north-east of Kathmandu which could be reached in 3 hours drive to headworks site at Chaku from Kathmandu. The project needs to construct around 3.41 km long approach road in total to access the surge tank area and the construction adit portal.

The Project is basically a run-of-river type scheme (Fig. MBK-INT 1.2) having the capacity of 102 MW with the design discharge of 50.8m<sup>3</sup>/sec at Q<sub>40</sub> exceedance and available gross head of 235m. The headworks site is located about one hundred meters downstream from the confluence of Chaku khola and Bhotekoshi river. The total headrace tunnel length is 7124 m from headrace inlet to the surge tank. This project utilizes water from Bhotekoshi river. Tail water from the powerhouse located at Jambu about 4 km upstream of Barhabise bazaar will be released to main river course about 100 m downstream of powerhouse site.

Bhotekoshi River is one of the major tributaries of the Sapta Koshi River in the Koshi Basin and is of the snow, glacier and rain-fed type.

### 2. Hydrology

The Bhotekoshi/ Sunkoshi River constitute one of the major tributaries of the Sapta Koshi Basin draining the Eastern Development Region of Nepal. The Bhotekoshi/ Sunkoshi Basin has a total catchment area of about 17,600 km<sup>2</sup> at Kampughat and its main tributaries starting from east to west are Dudh Koshi, Likhu Khola, Tama Koshi, Rosi Khola and Indrawati.

The Bhotekoshi river lies in between latitudes 27° 54' and 28° 29' N and longitudes 85° 42' and 86° 21' E. It originates from Tibet (China) and about 85 % of catchment lies in this region. It is known as Poiqu in Tibet and nine main streams drain out the runoff from Tibet. The total length of the Poiqu (Bhotekoshi) river within Tibet is about 81 km with a catchment area of 2000 km<sup>2</sup>. At Barhabise, its catchment area is about 2388 km<sup>2</sup>.

The catchment area in Tibet is difficult to access and to make an assessment of the general physical characteristics of basin, river system, glaciers and glacier lakes, including topography, and bathymetric surveys of it. Only available document, for this study is the "Report on First Expedition to Glaciers and Glacier Lakes in the Pumqu (Arun) and Poiqu (Bhote-Sun Koshi) River Basins, Xizang

Tibet, China", prepared by Lanzhou Institute of Glaciology and Geocryology, Water and Energy Commission Secretariat and Nepal Electricity Authority in 1988.

At the headwaters of Poiqu river, high slope is maintained with little runoff and later it runs with gentler slope. After joining with Targyailing, the runoff increases and the river gradient also increases up to the Nepal-Tibet border. Bhotekoshi demarcates the boundary between Nepal and Tibet for a considerable distance and the profile of the river becomes noticeably steeper as one proceeds downstream to the Friendship Bridge.

After entering into Nepal, Liping khola, Jung khola, Bhairab Kunda khola, Junrimba khola, Chaku khola and Kahule khola join Bhotekoshi. The total catchment area in Nepal at Bahrabise is about 360 km<sup>2</sup>. After joining with Sunkoshi at about 1 km downstream from Bahrabise, it is known by the name of Sunkoshi.

The length of the river from the Friendship Bridge to Bahrabise is about 30 km. The average slope in Tibet is about 3.7%, the slope along the border up to 7.0 km is about 10.5% and the later part of river grade is about 3.5% in Nepal up to Chaku Khola confluence.

The proposed weir site of the Middle Bhotekoshi Hydroelectric Project lies at Latitude 27° 53' 00" N and Longitude 85° 54' 42" E and is located at downstream of the confluence of Chaku Khola and Bhotekoshi River. The drainage area at the proposed weir site is about 2256 km<sup>2</sup>.

The proposed powerhouse site of the Middle Bhotekoshi Hydroelectric Project is at Khoran, Elevation 920 m, and located at left bank about 4 km upstream of Bahrabise. The total catchment area at the powerhouse site is about 2347 km<sup>2</sup>. The intermediate drainage area between the damsite and powerhouse site is about 91 km<sup>2</sup>. The average gradient of the river in between the damsite and powerhouse site is about 2.44%.

The ratio between the generated long-term mean monthly flows at the weir site by the specific yield method and the observed long-term mean monthly flows at Bahrabise are shown below in Table 1.

**Table 1: Long-term Mean Monthly Flows at Proposed Weir Site and at Barhabise**

Month	Weir Site (m <sup>3</sup> /s)	Barhabise (m <sup>3</sup> /s)
January	22.7	24.3
February	20.6	21.4
March	19.8	20.6
April	24.1	25.0
May	35.3	37.8
June	68.4	88.4
July	131.9	193.1
August	169.7	236.1
September	120.0	162.5
October	62.6	77.7
November	35.9	41.7

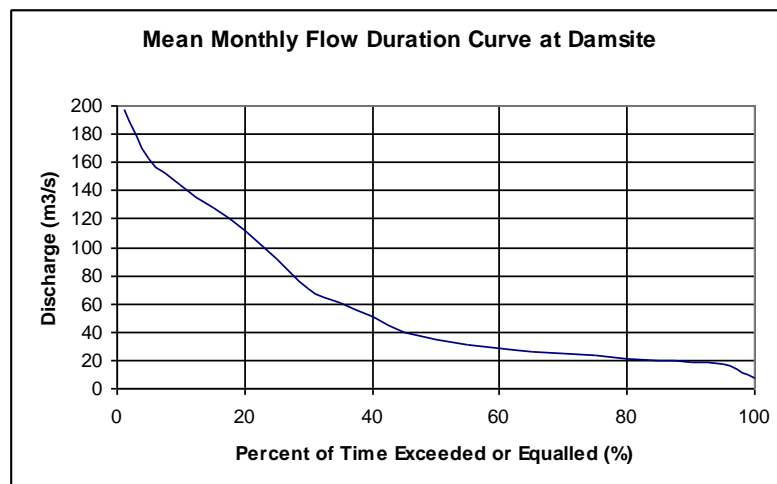
December	25.9	28.9
Annual	61.3	79.5

The flow duration curve was constructed from the generated mean monthly project inflow time series 1965-1995 at the weir site and is shown in Fig. MBK-HYD 2. The flows depending on given time exceedence are tabulated below in Table 2.

**Table 2: Time Exceedence of Mean Monthly Flows at Damsite**

Time Exceedence (%)	Days per Year	Discharge Equaled Or Exceeded ( $m^3/s$ )
40	146	50.8
45	164	39.5
50	183	34.7
55	201	31.2
60	219	28.8
65	237	26.5
70	256	25.0
75	274	23.5
80	292	21.7
85	310	20.2
90	329	18.4
95	347	16.9
99	361	10.5
100	365	7.8

**Fig. MBK-HYD 2: Flow Duration Curve at Damsite**



**Table 3: Low Flow Frequency Analysis**

Return Period (Years)	Minimum Instantaneous Flow (m <sup>3</sup> /s) at Barhabise	Minimum Instantaneous Flow (m <sup>3</sup> /s) at Weir Site
2	17.76	17.05
5	13.63	13.08
10	11.59	11.12
20	10.01	9.61
50	8.42	8.08
100	7.49	7.19

**Table 4: Estimated Floods for Middle Bhotekoshi HEP**

Return Period (Years)	Flood at intake site(m <sup>3</sup> /s)	Flood at Powerhouse (m <sup>3</sup> /s)
2	438	438
5	599	599
10	736	736
20	890	890
50	1130	1130
100	1330	1330
200	1560	1560
500	1900	1900
1000	2195	2195
10,000	3415	3415

### 3. Project Description

The Middle Bhotekoshi Hydroelectric Project is a run-of-river scheme. The headworks site is proposed at Chaku village about 100 m downstream from the confluence of Bhotekoshi river and Chakukhola (a tributary of Bhotekoshi River). The gated weir in the scheme diverts the water of Bhotekoshi river through a 376 m long pressure conduit and 7.12 km long headrace tunnel to the powerhouse proposed at Jambu village about 4 km upstream of Barhabise bazaar. The surface powerhouse will accommodate three units of generating equipment with vertical axis Francis turbines. The total installed capacity of the project is 102 MW and the annual salable energy will be 542.30GWh. Tail water from the powerhouse will be discharged to Bhotekoshi river.

The Middle Bhotekoshi Hydroelectric Project scheme consists of 47.5 m long diversion weir with three numbers of gates (10 m wide and 7.4m high) and one undersluice (10 m wide and 9.4 m high), a side intake structure, 100 m long, 37.5 m wide and 8 m deep triple chambered desanding basin, a forebay, a pressure conduit of length 376.04m, 7124 m long and 5.7 m X 5.7 m D-shaped headrace tunnel, 15 m diameter and 59.25 m high surge tank, 667.17 m long penstock and surface powerhouse. The powerhouse will accommodate three units each of 34 MW capacity positioned in vertical axis.

The headworks of Middle Bhotekoshi Hydroelectric Project consist of the following major structures:

- Gated diversion weir with an undersluice;
- Side intake with coarse trash racks;
- Six numbers of intake. Inflow regulate with stoplogs for the design flow;
- Triple chamber desanding basin;
- Closed conduit to connect the forebay with the headrace tunnel.

### 4. Power Transmission

Generated power from the Middle Bhotekoshi Hydroelectric Project (MBKHEP) will be evacuated to the Proposed Bahrabise Hub through 4km transmission line of 220 kV with Bison conductor.

### 5. Power and Energy Outputs

With the design discharge of 50.8 m<sup>3</sup>/s and the available gross head of 235 m the installed capacity of the project is 102 MW and the total annual sellable energy 542.30 GWh. The overall outage of 4% is considered to compute sellable energy the plant factor is found to be 64.88%.

**POWER & ENERGY CALCULATION**

Installed Capacity, MW	102.00	Rated Efficiency	
Design Discharge, m <sup>3</sup> /s	50.8	Generator	0.97
Minimum Release, m <sup>3</sup> /s	1.55	Turbine	0.93
Outage + Losses %	4%	Transformer	0.99
Gross Head, m	235.15	Combined	0.893

Months	No. of Days	Mean monthly flow	Available Plant flow	Net Head	Generation of Power	Sellable Energy
		m <sup>3</sup> /sec	m <sup>3</sup> /sec	m	kW	kWh
Baishakh	31	24.83	23.28	232.34	47,383	33,843,030
Jestha	31	44.15	42.60	226.70	84,606	60,429,172
Ashadh	32	111.63	50.80	223.31	99,388	73,276,741
Shrawan	31	148.20	50.80	223.31	99,388	70,986,843
Bhadra	31	127.86	50.80	223.31	99,388	70,986,843
Ashwin	31	74.95	50.80	223.31	99,388	70,986,843
Kartik	30	36.61	35.06	229.30	70,425	48,678,077
Mangsir	29	23.15	21.60	232.67	44,033	29,420,910
Poush	30	18.05	16.50	233.54	33,757	23,332,681
Magh	29	15.54	13.99	233.87	28,664	19,152,134
Falgun	30	15.52	13.97	233.88	28,626	19,786,380
Chaitra	30	16.68	15.13	233.73	30,987	21,418,248
<b>Total</b>	<b>365</b>					<b>542,297,900</b>
<b>Dry Season Sellable Energy (kWh)</b>				<b>83,689,443</b>		
<b>Wet Season Sellable Energy (kWh)</b>				<b>458,608,458</b>		
<b>Annual Sellable Energy (kWh)</b>				<b>542,297,900</b>		



## MIDDLE BHOTEKOSHI HYDROELECTRIC PROJECT (102 MW)

### SALIENT FEATURES

S. No.	Features	Description
1.	<b>Location</b>	Sindhupalchowk District
2.	<b>Type of Project</b>	Run-of-River (ROR)
3.	<b>Hydrology</b>	
	Catchment area (Dam site)	2284 km <sup>2</sup>
	90% dependable flow	17.0 m <sup>3</sup> /sec
	Design flow (Q <sub>40</sub> )	50.8 m <sup>3</sup> /sec
	Design flood (100 years)	1330 m <sup>3</sup> /sec
4.	<b>Geology</b>	Biotite schist, quartzite and siliceous dolomite
5.	<b>Head</b>	
	<b>Gross</b>	235 m
	<b>Net</b>	222 m
6.	<b>Headworks</b>	
	Weir Type	Gated Weir Type
	Gate Size & Nos.	10 m (w) x 7.4 m (h) & 3 Nos.
	Undersluice Size & No.	Single Bay 10 m (w) & x 9.4 m (h)
	Foundation Material	Bed rock
	Maximum Discharge	1330 m <sup>3</sup> /sec
	Type of Energy Dissipation	Downstream Stilling Pool
7.	<b>Desanding Basin</b>	
	Type	Triple Chamber
	Size	100 m (l) x 12.50 m (w) x 8 m (h)
8.	<b>Pressure Conduit</b>	
	Concrete Duct Size	280.91 m (l) x 5 m (w) x 5 m (h)
	Steel Pipe	95.13 m (l) x $\phi$ 4 m
9.	<b>Headrace Tunnel</b>	
	Length	7124 m
	Size	5.7 m (w) x 5.7 m (h)
10.	<b>Surge Tank</b>	
	Type	Semi-underground, Restricted
	Size	Orifice 15 m (dia.) x 59.25 m (h)
11.	<b>Penstock</b>	
	Type & Number	Underground, 1 No.
	Size	667.17 m (l) m (dia.)
12.	<b>Powerhouse</b>	
	Type	Surface Powerhouse
	Size	62.85 m (l) x 15.0 m (b), 29.75 m (h)

<b>13. Tailrace</b>	50 m (l) x 6 m (b) x 6 m (h)
<b>14. Turbine</b>	
Type, Orientation & Number	Francis, Vertical Axis & 3 Nos.
Unit Capacity	36 MW
<b>15. Generator</b>	
Type & Number	AC 3 Phase Synchronous & 3 Nos.
Unit Capacity	40 MVA
<b>16. Installed Capacity</b>	102 MW (3 x 34 MW)
<b>17. Annual Salable Energy</b>	542 GWh
Dry	84 GWh
Wet	458 GWh
<b>18. Transmission Line</b>	
Length/ Voltage	4 km/220 kV

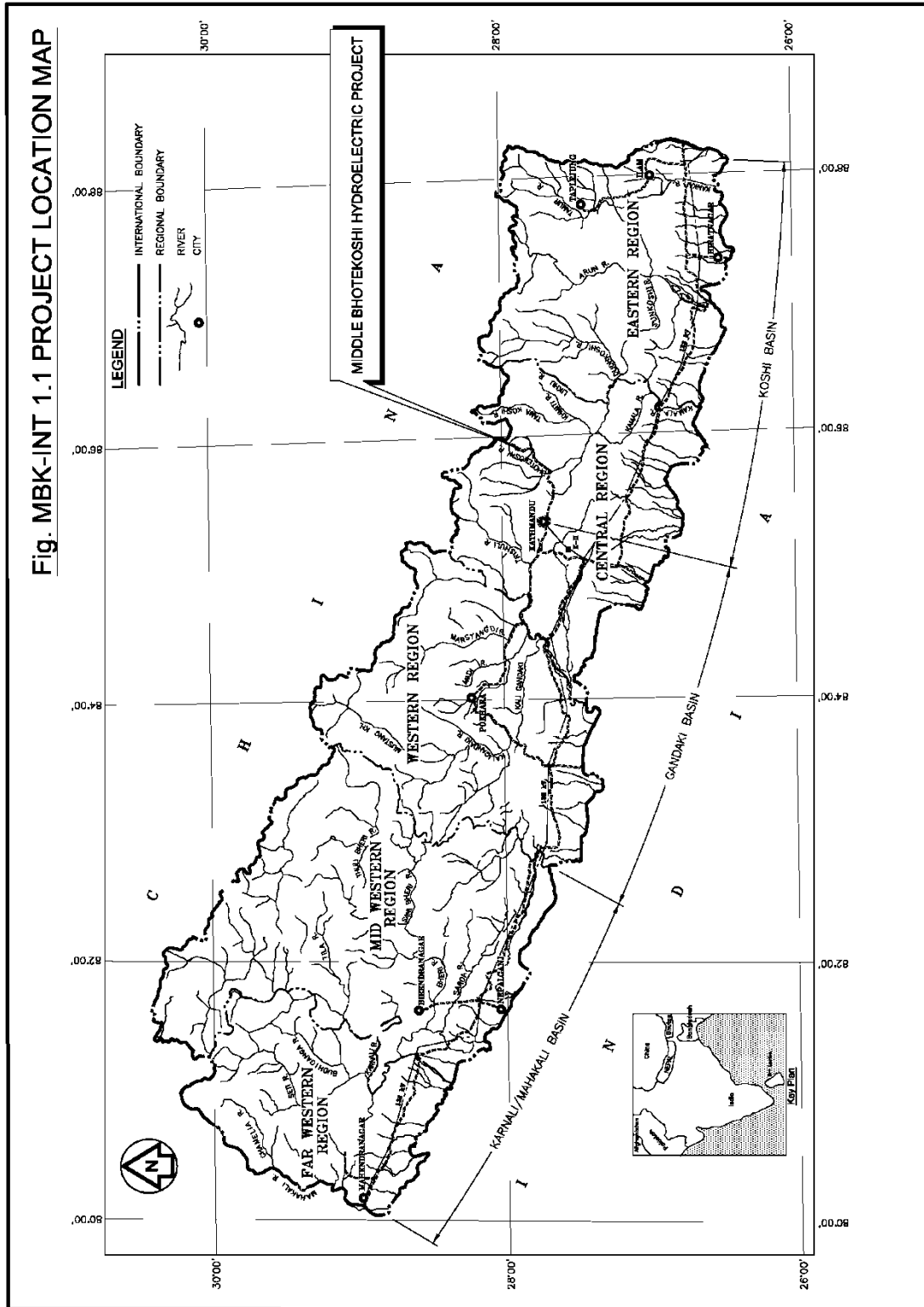


Fig. MBK-INT 1.1 Project Location Map

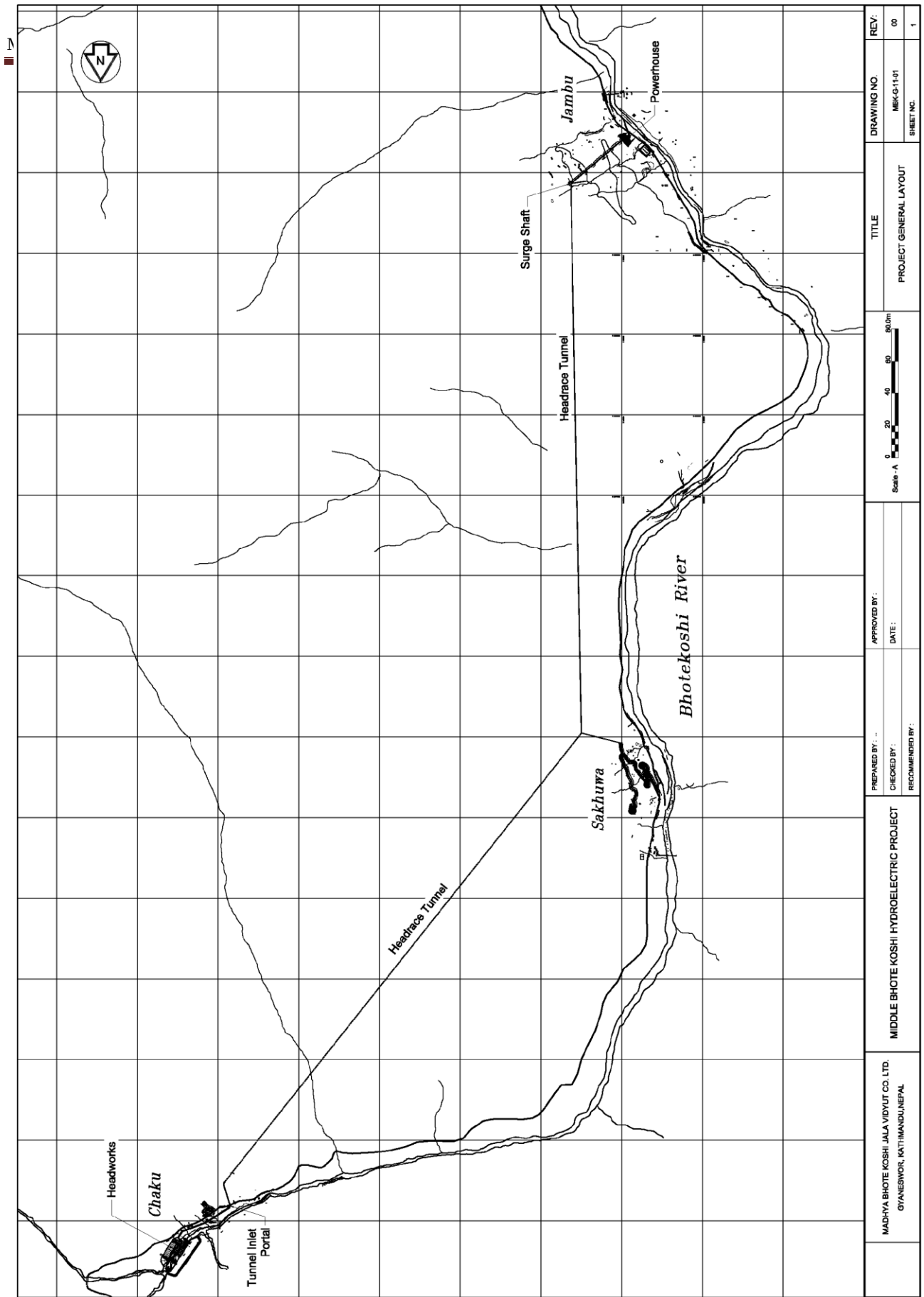


Fig. MBK-INT 1.2 General Project Layout Map