### **NEPAL ELECTRICITY AUTHORITY**

(An Undertaking of Government of Nepal)



# Bidding Documents for Procurement of Plant Design, Supply and Installation of

Lekhnath Damauli 220 kV Transmission Line Project Package A: OHL

Single-Stage: Two-Envelope Bidding Procedure

KfW Development Bank
September 2022

# Procurement of Plant Design, Supply, and Installation

Single-Stage: Two-Envelope Bidding Procedure

## Bidding Document for

Lekhnath Damauli 220 kV Transmission Line Project
Package A: OHL

Issued on 09 September 2022

Invitation for Bids No. ICB/NEA/LD220KVTLP/Package-A

Procurement No. BMZ201667773/KfW508597

ICB No. ICB/NEA/LD220KVTLP/Package-A

**Employer** Nepal Electricity Authority

Country Nepal

### Document approval

	Name	Signature	Position	Date
Prepared by:	red by: Dr Pierernesto Gatti FICHTNER Date: 2022.09.12			30.08.2022
Checked by:	Elmar Neubauer	Digitally signed by Neubauer, Elmar FICHTNER Date: 2022.09.12	Projects Director	30.08.2022

### Document revision record

Rev.	Date	Details of revision	Fichtner Doc Ref.	Prepared by	Checked by
0	15.02.2022	First issue	RNWS7JUM2C5X- 1730981799-5288/v1.0	Sönmez-Kiral	Dr Gatti
1	27.06.2022	Revision 1	RNWS7JUM2C5X- 1730981799-6457	Dr Gatti	Neubauer
2	30.08.2022	Revision 2	RNWS7JUM2C5X- 1730981799-6457	Dr. Gatti	Neubauer

### Disclaimer

The content of this document is intended for the exclusive use of Fichtner's client and other contractually agreed recipients. It may only be made available in whole or in part to third parties with the client's consent and on a non-reliance basis. Fichtner is not liable to third parties for the completeness and accuracy of the information provided therein.

### **Preface**

This Standard Bidding Document ("SBD") for Procurement of Plant Design, Supply and Installation has been prepared by KfW Development Bank ("KfW") and is based on the Master Procurement Document "Standard Bidding Documents for Procurement of Works and User's Guide" developed by the Multilateral Development Banks and International Financing Institutions, which represents the best practices of these institutions.

### **Invitation for Bids**

Republic of Nepal NEPAL Electricity Authority (NEA) Lekhnath Damauli 220 kV Transmission Line Project; Package A: 220 kV D/C Transmission Line from Substation Lekhnath - SS Damauli

BMZ No.: 2016 67 773: KfW No. 508597

The NEPAL Electricity Authority (NEA) has received financing from KfW toward the cost of the Lekhnath Damauli 220 kV Transmission Line Project and intends to apply part of the proceeds toward payments under the contract for Package A: 220 kV D/C Transmission Line from Substation Lekhnath - SS Damauli.

Remaining part of the costs shall be covered by NEA. In addition, a Letter of Credit issued by NEA shall be provided for the 70% of the Price Schedule I to the successful bidder when the contract is awarded.

The NEPAL Electricity Authority (NEA) now invites sealed Bids from eligible Bidders for the supply, installation, erection and commissioning of Package A: 220 kV D/C Transmission Line from Substation Lekhnath to Substation Damauli, The Transmission Lines Scope includes design, all equipment and facilities, civil works, supply of spare parts as required by the detail design of the Contractor. It shall further include the manufacturing, testing, delivery, installation, commissioning energization, trial operation and training of the Employer's personnel, complete in each respect on a turnkey basis, as detailed and specified in the Part II, Employer's Requirements. The period foreseen for the completion of the works shall be 24 months followed by 24 months defects notification period.

The contact conditions will be the "Conditions of Contract for Plant and Design-Build, First Edition 1999" (FIDIC Yellow Book).

Open competitive bidding will be conducted by means of the International Competitive Bidding procedure with qualification as specified in the KfW's Procurement Guidelines ("Guidelines"), January 2021.

Eligible bidders will be required to submit full qualification information with their bids establishing their eligibility to bid and qualification to perform the contract if the bid is accepted. Qualification requirements include, inter alia:

- an average annual turnover (defined as certified payments received for works in progress or completed) within the last five (5) fiscal years USD 15,000,000
- The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as USD 2,500,000.00 for the subject contract(s) net of the Bidder's other commitments.
- Experience under construction contracts in the role of prime contractor or JV member for at least the last 10 years, starting 1st January 2012.

- Similar contracts satisfactorily and substantially<sup>1</sup> completed as a prime contractor or joint venture member, in at least 3 contracts 220kV or above, between 1st January 2012 and application submission deadline of minimum value USD 12,000,000.00.
  - One of the contracts above shall be outside of the Bidder's home country that has been successfully or substantially completed in the geographical<sup>2</sup> region or in Asia.
  - Further, one of the above-mentioned contracts or other contracts at 132 kV or 220kV level shall be carried out in Nepal. In case of an JV, this requirement must be fulfilled individually by the leading member and JV member.
  - In addition, the Bidder (in case of JV the leading member) shall provide evidence about local presence in Nepal within the last 5 years.
- For the above or any other contracts completed and under implementation as prime contractor or joint venture member on or after the first day of the calendar year during the period stipulated above, a minimum construction experience in the following key activities successfully completed:
  - At least 3 contracts for preparation of detailed engineering design for 220 kV or above Overhead Transmission Lines within last 10 years (i.e. since 1st January 2012 and Bid submission deadline); Note: Bidders are required to have In-house design team. The In-house design team shall be fluent in English (writing/speaking).
- The Bidding Documents included herein have been extended to include environmental and social and health and safety requirements. These requirements need to be adopted. The ESHS qualification and capacity will be evaluated based on a scoring system.
- The evaluation of evidence of qualification focuses solely on the respective Bidder and shall not take into account any qualifications of its subsidiaries, parent entities, affiliates or any other Person different from the Bidder, unless they are associated in the form of a JV with joint and several liability. Exceptionally a Bidder with insufficient financial track regard (e.g. start-up or spin-off companies) can demonstrate its financial qualification by presenting a legally binding letter of comfort of a financially sound parent company (to be demonstrated).

<sup>&</sup>lt;sup>1</sup> Substantial completion shall be based on 80% or more works completed under the contract.

<sup>&</sup>lt;sup>2</sup> Southern Region means the countries listed under "Southern Region" according to the Statistics Division of United Nations https://unstats.un.org/unsd/methodology/m49/

Eligible Bidders may obtain further information from:

#### Attention:

### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Attention: Mr. Jagadish Sharma Poudel
Address: Lekhnath Damauli 220 kV Transmission Line Project
Lekhnath Substation, Badahare, Pokhara Metropolitan city ward no. 27,
33700, Kaski (Nepal)
Email: Id220kvtlp@gmail.com

As from 15 September 2022, 10:00 AM (Nepali time), eligible Bidders may collect the Bidding Document from the above office upon payment of a non-refundable fee of Nepalese Rupee (NPR) 20,000. The price includes one set of documents as hard copy and a soft copy recorded on USB. The method of payment will be transfer through a bank account.

Name of Bank: Everest Bank Limited, Maitidevi, Nepal In favor of: Bidding Documents Package B Substations

Name of Office: Lekhnath Damauli 220kV Transmission Line Project
Account No.: 03400105200496

The request shall be accompanied by a duly authorized cover letter, clearly stating the name of the company and the country of domicile.

Upon request, the documents can be dispatched by courier. However, courier charges shall be paid by the Bidder. No liability will be accepted for loss or late delivery.

Bids must be delivered to the Employer's office address mentioned above and as indicated in the ITB 22.1, on **14 November 2022, 12:00 noon (Nepal Time)**, on the same day, **at 14:00 Hour** (Nepal Time) the technical envelope will be opened first in the presence of those Bidders' representatives who choose to attend. Late Bids will be rejected.

### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Attention: Mr. Jagadish Sharma Poudel Address:

Lekhnath Damauli 220 kV Transmission Line Project Lekhnath Substation, Badahare, Pokhara Metropolitan city ward no. 27, 33700, Kaski (Nepal) one (1) Copy of the bid shall be sent at the following address:

### Fichtner GmbH & Co. KG

Attention: Dr. Pierernesto Gatti Address: Sarweystr. 3 City: 70191 Stuttgart Country: Germany

Electronic mail address: pierernesto.gatti@fichtner.de

The controlling address for timely submission is the Employer's address mentioned above.

All joint ventures, consortia, partnerships or other unincorporated groupings shall submit with the Bid a copy of the Agreement, entered between the partners, which shall be signed by all partners.

The Employer will be not responsible for any costs or expenses incurred by Bidders in connection with the preparation or delivery of their Bids.

A pre-bid meeting and site visit will take place on **10 October 2022**, **12:00 noon (Nepal time)** at project office, Lekhnath substation, Pokhara Metropolitan city, Ward 27.

In the first public session, only the Technical Bids will be opened in the presence of the Bidders' designated representatives. In the second public session only the financial Bids of those Bidders who have fulfilled the technical requirements as per the tender document will be opened.

Due to the current COVID-19 situation, the Employer may decide to schedule virtual meetings via teleconference if travel restrictions will still be in force. Especially, should the site visit not be possible, the Employer will inform Bidders accordingly and will share further instruction and information.

All Bids must be accompanied by a Bid Security, if available.

### **Table of Contents**

PART 1 – Bidding Procedures	10
Section I. Instructions to Bidders	
Section II. Bid Data Sheet	
Section III. Evaluation and Qualification Criteria	47
Section IV. Bidding Forms	63
Section V. Eligibility Criteria	136
Section VI. KfW Policy – Sanctionable Practice – Social and Environmental	
Responsibility	138

## PART 1 – BIDDING PROCEDURES

### **Section I. Instructions to Bidders**

### **Table of Clauses**

Α.	General	
	1. Scope of Bid	13
	2. Source of Funds	13
	3. Corrupt and Fraudulent Practices	
	4. Eligible Bidders	
	5. Eligible Materials, Equipment, and Services	
	3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
В.	Contents of Bidding Documents	16
	6. Sections of Bidding Document	
	7. Clarification of Bidding Documents, Site Visit, Pre-Bid Meeting	
	8. Amendment of Bidding Documents	
	<b>5</b>	
C.	Preparation of Bids	18
	9. Cost of Bidding	
	10. Language of Bid	
	11. Documents Comprising the Bid	18
	12. Letter of Technical Bid, Declaration of Undertaking, Attachments, Letter of F	
	Bid and Schedules	
	13. Alternative Bids	20
	14. Documents Establishing the Eligibility of the Plant and Installation services	21
	15. Documents Establishing the Eligibility and Qualifications of the Bidder	
	16. Documents Establishing Conformity of the Plant and Installation Services	
	17. Financial Bid Prices and Discounts	
	18. Currencies of Bid and Payment	24
	19. Period of Validity of Bids	
	20. Bid Security	
	21. Format and Signing of Bid	
D.	Submission and Opening of Bids	27
	22. Sealing and Marking of Bids	
	23. Deadline for Submission of Bids	
	24. Late Submissions	
	25. Withdrawal, Substitution, and Modification of Bids	28
	26. Bid Opening	
	·	
E.	Evaluation of Technical Bids	
	27. Determination of Responsiveness of Technical Bids	30
	28. Evaluation of Technical Bids	30
	29. Eligibility and Qualification of the Bidder	31
	30. Clarification of Technical Bids	32
	31. Invitation to 2nd Public Session for Opening of Financial Bids	32
F.	Evaluation and Comparison of Financial Bids	
	32. Confidentiality	32
	33. Clarification of Financial Bids	33
	34. Deviations, Reservations, and Omissions	33
	35. Determination of Responsiveness	33
	36. Nonmaterial Nonconformities	
	37. Correction of Arithmetical Errors	34

38. Conversion to Single Currency	
39. Margin of Preference	
40. Evaluation of Financial Bids	
41. Comparison of Bids	
42. Employer's Right to Reject All Bids	
1 7 3 7	
G. Award of Contract	
43. Award Criteria	
44. Notification of Award	36
45. Signing of Contract	
46. Performance Security	

### Section I. Instructions to Bidders

### A. GENERAL

### 1. Scope of Bid

- 1.1 In connection with the Invitation for Bids specified in the Bid Data Sheet (BDS), the Employer, as specified in the BDS, issues these Bidding Documents ("Bidding Documents") to Bidders ("Bidders") interested in submitting bids ("Bids") for the procurement of Plant and Installation Services as specified in Section VII, Employer's Requirements. The International Competitive Bidding ("ICB") number corresponding to this bidding process is also provided in the BDS.
- 1.2 Throughout these Bidding Documents:
  - (a) The term "in writing" means communicated in written form and delivered against receipt
  - (b) Except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and
  - (c) "Day" means calendar day.

### 2. Source of Funds

2.1 The Employer as indicated in the **BDS** has applied for or received financing (hereinafter called "funds") from KfW Development Bank (hereinafter called "KfW") towards the cost of the project named in the **BDS**. The Employer intends to apply a portion of the funds to eligible payments under the contract(s) resulting from this bidding process.

## 3. Corrupt and Fraudulent Practices

- 3.1 KfW requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Section VI.
- 3.2 In further pursuance of this policy, Bidders shall permit and shall cause its agents to provide information and permit KfW or an agent appointed by KfW to inspect on site all accounts, records and other documents relating to bid submission and contract performance (in the case of award), and to have them audited by auditors or agents appointed by KfW.

### 4. Eligible Bidders

- 4.1 A Bidder may be a private entity or a government-owned entity subject to ITB 4.3 or any combination of such entities in the form of a joint venture ("JV") under an existing agreement or with the intent to enter into such an agreement supported by a Letter of Intent. In the case of a Joint Venture:
  - (a) unless otherwise specified in the **BDS**, all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms, and
  - (b) the JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution. Unless specified in the **BDS**, there is no limit on the number of members in a JV.
- 4.2 A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this procurement process, if the Bidder:
  - (a) Directly or indirectly controls, is controlled by or is under common control with another Bidder; or
  - (b) Receives or has received any direct or indirect subsidy from another Bidder; or
  - (c) Has the same legal representative as another Bidder; or
  - (d) Has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
  - (e) Participates in more than one bid in this bidding process, both as an individual firm and as a JV member. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which such Bidder is involved. However, this does not limit the inclusion of the same subcontractor in more than one Bid; or
  - (f) Any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the Bid; or
  - (g) Any of its affiliates has been hired (or is proposed to be hired) by the Employer as Engineer for the Contract implementation; or
  - (h) Has a close business or family relationship with a professional staff of the Employer (or of the project implementing agency, or of a recipient of a part of the funds)

who: (i) are directly or indirectly involved in the preparation of the bidding documents or specifications of the contract, and/or the bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the KfW throughout the procurement process and execution of the contract.

- 4.3 The KfW's eligibility criteria to bid are described in Section V, Eligibility Criteria.
- 4.4 A Bidder shall not be under suspension from bidding by the Employer as the result of the execution of a Bid–Securing Declaration.
- 4.5 This bidding is open only to prequalified Bidders.
- 4.6 A Bidder shall provide such evidence of eligibility satisfactory to the Employer, as specified in ITB 15.1 or as the Employer shall reasonably request.

## 5. Eligible Materials, Equipment, and Services

5.1 The Plant and Installation Services to be supplied under the Contract and financed by the KfW may have their origin in any country subject to the restrictions specified in Section V, Eligibility Criteria, and all expenditures under the Contract will not contravene such restrictions. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.

### **B. Contents of Bidding Documents**

## 6. Sections of Bidding Document

6.1 The Bidding Documents consists of Parts 1, 2, and 3, which include all the Sections specified below, and which shall be read in conjunction with any Addenda issued in accordance with ITB 8.

### PART 1 Bidding Procedures

- (a) Section I. Instructions to Bidders (ITB)
- (b) Section II. Bid Data Sheet (BDS)
- (c) Section III. Evaluation and Qualification Criteria
- (d) Section IV. Bidding Forms
- (e) Section V. Eligibility Criteria
- (f) Section VI. KfW Policy Sanctionable Practice Social and Environmental Responsibility

### PART 2 Employer's Requirements

(g) Section VII. Employer's Requirements

### PART 3 Conditions of Contract and Contract Forms

- (h) Section VIII. General Conditions (GC)
- (i) Section IX. Particular Conditions (PC)
- (j) Section X. Contract Forms.
- 6.2 The Invitation for Bids issued by the Employer is not part of the Bidding Document.
- 6.3 Unless obtained directly from the Employer, the Employer is not responsible for the completeness of the Bidding Documents, responses to requests for clarification, minutes of the pre-Bid meeting (if any), or Addenda in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Employer shall prevail.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents and to furnish with its Bid all information and documentation as is required by the Bidding Documents.

## 7. Clarification of Bidding Documents, Site Visit, Pre-Bid Meeting

- 7.1 A Bidder requiring any clarification of the Bidding Documents shall contact the Employer in writing at the Employer's address specified in the **BDS** or raise its enquiries during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer will respond in writing to any request for clarification, provided that such request is received no later than fourteen (14) days prior to the deadline for submission of Bids. The Employer shall forward copies of its response to all Bidders who have acquired the Bidding Documents in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. If indicated in the BDS, the Employer shall also promptly publish its response at the web page identified in the BDS. Should the Employer deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under ITB 8 and ITB 23.2.
- 7.2 The Bidder is advised to visit and examine the Site where the plant is to be installed and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the Bid and entering into a contract for the provision of Plant and Installation Services. The costs of visiting the Site shall be at the Bidder's own expense.
- 7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
- 7.4 The Bidder's designated representative is invited to attend a pre-bid meeting, if provided for in the BDS. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 7.5 The Bidder is requested, as far as possible, to submit any questions in writing, to reach the Employer not later than one week before the meeting.
- 7.6 Minutes of the pre-bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Documents in accordance with ITB 6.3. Any modification to the Bidding Documents that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting. Unless otherwise specified in the BDS nonattendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.

## 8. Amendment of Bidding Documents

- 8.1 At any time prior to the deadline for submission of Bids, the Employer may amend the Bidding Documents by issuing an Addendum.
- 8.2 Any Addendum issued shall be part of the Bidding Documents and shall be communicated in writing to all who have obtained the Bidding Documents from the Employer in accordance with ITB 6.3. The Employer shall also promptly publish the Addendum on the Employer's web page in accordance with ITB 7.1.
- 8.3 To give Bidders reasonable time in which to take an Addendum into account in preparing their Bids, the Employer may, at its discretion, extend the deadline for the submission of Bids in accordance with ITB 23.2

### C. PREPARATION OF BIDS

### 9. Cost of Bidding

9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

### 10. Language of Bid

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

## 11. Documents Comprising the Bid

11.1 The Bid shall comprise the following:

### (a) TECHNICAL BID

- (i) Letter of Technical Bid, indicating the Bidder's name, address, telephone, fax and email. If the Bidder is an association, the Letter of Technical Bid shall also describe the form of association and list the association members
- (ii) Alternative Technical Bids in accordance with ITB 13
- (iii) Declaration of Undertaking in the format provided in Section IV, Bidding Forms
- (iv) Written confirmation authorizing the signatory of the Technical Bid and the Financial Bid to commit the Bidder, in accordance with ITB 20.2 and authorizing the representative of the Bidder, designated in accordance with ITB 4.1 to submit the Technical Bid and Financial Bid on behalf of the Bidder. If the Bidder is a JV, the authorization shall be provided by the Lead Member

- nominated in the JV Agreement or in the Declarations of Association, submitted in accordance with ITB 4.1. If the representative of the Bidder is the owner, member or director of the Bidder or the Bidder's Lead Member, if nominated in accordance with ITB 4.1, an authorization shall not be necessary
- (v) documentary evidence established in accordance with ITB 14.1 that the Plant and Installation Services offered by the Bidder in its bid or in any alternative bid are eligible
- (vi) documentary evidence in accordance with ITB 15 establishing the Bidder's continued eligibility and qualifications to perform the contract if its Bid is accepted
- (vii) documentary evidence established in accordance with ITB 16 that the Plant and Installation Services offered by the Bidder conform to the Bidding Document
- (viii) in the case of a Technical Bid submitted by a JV, JV agreement, or letter of intent to enter into a JV including a draft agreement, indicating at least the parts of the Plant to be executed by the respective partners
- (ix) List of subcontractors, in accordance with ITB 16.3; and
- (x) Any other document required in the **BDS**.

Technical Bids are unpriced bids and shall contain no prices or price schedules or other reference to rates and prices for completing the facilities. Technical Bids containing such price information will be rejected.

### (b) FINANCIAL BID

- Letter of Financial Bid and the Bidding Forms in accordance with ITB 12
- (ii) Completed schedules as required, including Price Schedules, in accordance with ITB 12 and 14 and as indicated in the BDS
- (iii) Bid Security, in accordance with ITB 20.1
- (iv) Alternative Financial Bids, if permissible in accordance with ITB 13
- (v) Any other document required in the **BDS**.
- 11.2 In addition to the requirements under ITB 11.1(a), Bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Bid shall be signed by all members and submitted with the Bid, together with a copy of the proposed Agreement.

- 11.3 The Bidder shall furnish information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.
- 12. Letter of
  Technical Bid,
  Declaration of
  Undertaking,
  Attachments, Letter
  of Financial Bid and
  Schedules
- 12.1 The Letter of Technical Bid, the Declaration of Undertaking and any attachments shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The Letter of Technical Bid and the Declaration of Undertaking must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.4. All blank spaces shall be filled in with the information requested.
- 12.2 The Letter of Financial Bid and appropriate Price Schedules shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The Letter of Financial Bid must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.4. All blank spaces shall be filled in with the information requested.

### 13. Alternative Bids

- 13.1 The **BDS** indicates whether alternative bids are allowed. If they are allowed, the **BDS** will also indicate whether they are permitted in accordance with ITB 13.3 or invited in accordance with ITB13.2 and/or ITB 13.4.
- 13.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the BDS, and the method of evaluation shall be included in Section III, Evaluation and Qualification Criteria.
- 13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the Employer's requirements as described in the bidding document must also provide: (i) a price at which they are prepared to offer a plant meeting the Employer's requirements; and (ii) all information necessary for a complete evaluation of the alternatives by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed installation methodology and other relevant details. Only the technical alternatives, if any, of the lowest evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.
- 13.4 When bidders are invited in the BDS to submit alternative technical solutions for specified parts of the facilities, such parts shall be described in Section VII, Employer's Requirements. Technical alternatives that comply with the performance and technical criteria specified for the Plant and Installation Services shall be considered by the Employer on their own merits, pursuant to ITB 35.

# 14. Documents Establishing the Eligibility of the Plant and Installation services

- 14.1 To establish the eligibility of the Plant and Installation Services in accordance with ITB Clause 5, Bidders shall complete the country-of-origin declarations in the Price Schedule Forms, included in Section IV, Bidding Forms.
- 15. Documents
  Establishing the
  Eligibility and
  Qualifications of the
  Bidder
- 15.1 To establish its eligibility and continued qualifications to perform the Contract in accordance with Section III, Evaluation and Qualification Criteria, the Bidder shall provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms.

# 16. Documents Establishing Conformity of the Plant and Installation Services

- 16.1 The Bidder shall furnish a Technical Bid including the information stipulated in Section IV, in sufficient detail to demonstrate substantial responsiveness of the Bidders' proposal to the Employer's requirements and the completion time.
- 16.2 For major items of Plant and Installation Services as listed by the Employer in Section III, Evaluation and Qualification Criteria, which the Bidder intends to purchase or subcontract, the Bidder shall give details of the name and nationality of the proposed Subcontractors, including manufacturers, for each of those items. In addition, the Bidder shall include in its bid information establishing compliance with the requirements specified by the Employer for these items. Quoted rates and prices will be deemed to apply to whichever Subcontractor is appointed, and no adjustment of the rates and prices will be permitted.
- 16.3 The Bidder shall be responsible for ensuring that any Subcontractor proposed complies with the requirements of ITB 4, and that any plant, or services to be provided by the Subcontractor comply with the requirements of ITB 5 and ITB 15.1.

### 17. Financial Bid Prices and Discounts

17.1 Unless otherwise specified in the **BDS**, bidders shall quote for the entire Plant and Installation Services on a "single responsibility" basis such that the total bid price covers all the Contractor's obligations mentioned in or to be reasonably inferred from the bidding document in respect of the design, manufacture, including procurement and subcontracting (if any), delivery, construction, installation and completion of the plant.

This includes all requirements under the Contractor's responsibilities for testing, pre-commissioning and commissioning of the plant and, where so required by the bidding document, the acquisition of all permits, approvals and licenses, etc.; the operation, maintenance and training services and such other items and services as may be specified in the Bidding Document, all in accordance with the requirements of the General Conditions. Items against which no price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed to be covered by the prices for other items.

- 17.2 Bidders are required to quote the price for the commercial, contractual and technical obligations outlined in the bidding document.
- 17.3 Bidders shall give a breakdown of the prices in the manner and detail called for in the Price Schedules included in Section IV, Bidding Forms.
- 17.4 Depending on the scope of the Contract, the Price Schedules may comprise up to the seven (7) schedules listed below. Separate numbered Schedules included in Section IV, Bidding Forms, from those numbered I-V below, shall be used for each of the elements of the Plant and Installation Services. The total amount from each Schedule corresponding to an element of the Plant and Installation Services shall be summarized in the schedule titled Grand Summary, (Schedule VI), giving the total bid price(s) to be entered in the Letter of Bid.

Schedule No. I Plant (including Mandatory Spare

Parts) Supplied from Abroad

Schedule No. II Plant (including Mandatory Spare

Parts) Supplied from within the Em-

ployer's Country

Schedule No. III Design Services

Schedule No. IV Installation Services

Schedule No. V ESHS Requirements

Schedule No. VI Grand Summary

(Schedule Nos. I to V)

Schedule No. VII Recommended Spare Parts

Bidders shall note that the plant and equipment included in Schedule Nos. I and II above exclude materials used for civil, building and other construction works. All such materials shall be included and priced under Schedule No. IV, Installation Services.

- 17.5 In the Schedules, bidders shall give the required details and a breakdown of their prices as follows:
  - (a) Plant to be supplied from abroad (Schedule No. I):

The price of the plant shall be quoted on CIP-named place of destination basis as specified in the **BDS** 

(b) Plant manufactured within the Employer's country (Schedule No. II):

- (i) The price of the plant shall be quoted on an EXW Incoterm basis (such as "ex-works," "ex-factory," "ex-warehouse" or "off-the-shelf," as applicable),
- (ii) Sales tax and all other taxes payable in the Employer's country on the plant if the contract is awarded to the Bidder, and
- (iii) The total price for the item.
- (c) Design Services (Schedule No. III).
- (d) Installation Services shall be quoted separately (Schedule No. IV) and shall include rates or prices for local transportation to named place of final destination as specified in the BDS, insurance and other services incidental to delivery of the plant, all labor, contractor's equipment, temporary works, materials, consumables and all matters and things of whatsoever nature, including operations and maintenance services, the provision of operations and maintenance manuals, training, etc., where identified in the Bidding Document, as necessary for the proper execution of the installation and other services, including all taxes, duties, levies and charges payable in the Employer's country as of twenty-eight (28) days prior to the deadline for submission of bids unless otherwise specified in the BDS.
- (e) ESHS Requirements (Schedule No. V)
- (f) Recommended spare parts shall be quoted separately (Schedule VII) as specified in either subparagraph (a) or (b) above in accordance with the origin of the spare parts.
- 17.6 The current edition of Incoterms, published by the International Chamber of Commerce shall govern.
- 17.7 The prices shall be either fixed or adjustable as specified in the **BDS**.
- 17.8 In the case of Fixed Price, prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account. A Financial Bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.
- 17.9 In the case of Adjustable Price, prices quoted by the Bidder shall be subject to adjustment during performance of the contract to reflect changes in the cost elements such as labor, material, transport and contractor's equipment in accordance with the procedures specified in the Conditions of Contract and the Schedule of Adjustment Data. A bid submitted with a fixed price quotation will not be rejected, but the price adjustment will be treated as zero. Bidders are required to indicate the source of labor and material indices in the corresponding Form in Section IV, Bidding Forms, and to furnish the indices and weightings for the price adjustment

- formulae. The Employer may require the Bidder to justify its proposed indices and weightings.
- 17.10 If so indicated in ITB 1.1, Bids are being invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer any price reduction (discount) for the award of more than one Contract shall specify in their Letter of Financial Bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package, and the manner in which the price reductions will apply.
- 17.11 Bidders wishing to offer any unconditional discount shall specify in their Letter of Financial Bid the offered discounts and the manner in which price discounts will apply.
- 17.12 Unless otherwise specified in the **BDS**, the Bid price shall estimate, as separate amounts, (a) import duties and (b) taxes, fees, levies and other charges, which shall apply, in terms of the Applicable Law, to the Contractor and its sub-Contractors, including their personnel, other than nationals or permanent residents in the Employer's country as of the date 28 days prior to the deadline for submission of Bids. Unless otherwise stated in the **BDS**, the Contractor and its sub-Contractors are responsible for meeting all tax liabilities arising out of the Contract.

## 18. Currencies of Bid and Payment

- 18.1 The currency(ies) of the Bid and the currency(ies) of payments shall be as specified in the **BDS**.
- 18.2 Bidders may be required by the Employer to justify, to the Employer's satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the prices shown in the Schedule of Adjustment Data are reasonable, in which case a detailed breakdown of the foreign currency requirements shall be provided by Bidders.

## 19. Period of Validity of Bids

- 19.1 Bids shall remain valid for the period specified in the **BDS** after the Bid submission deadline date prescribed by the Employer in accordance with ITB 22.1. A Bid valid for a shorter period shall be rejected by the Employer as non-responsive.
- 19.2 In exceptional circumstances, prior to the expiration of the Bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 20, it shall also be extended for forty-two (42) days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB 19.3.

19.3 In the case of fixed price contracts, if the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, the Contract price shall be adjusted by a factor or factors specified in the request for extension. Bid evaluation shall be based on the Bid Price without taking into consideration the above correction.

### 20. Bid Security

- 20.1 The Bidder shall furnish as part of its Bid, either a Bid-Securing Declaration or a Bid Security as specified in the BDS, in original form and, in the case of a Bid Security, in the amount and currency specified in the BDS.
- 20.2 Reserved.
- 20.3 The Bid Security shall be a demand guarantee in the form of an unconditional guarantee issued by a bank or financial institution (such as an insurance, bonding or surety company) from a reputable source from an eligible country as specified in Section V, Eligibility Criteria. If the unconditional guarantee is issued by a financial institution located outside the Employer's Country, the issuing financial institution shall have a correspondent financial institution located in the Employer's Country to make it enforceable. The Bid Security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, or in another substantially similar format approved by the Employer prior to bid submission. The Bid Security shall be valid for forty-two (42) days beyond the original validity period of the Bid, or beyond any period of extension if requested under ITB 19.2.
- 20.4 Any Bid not accompanied by a substantially responsive Bid Security shall be rejected by the Employer as non-responsive.
- 20.5 The Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the Contract and furnishing the Performance Security pursuant to ITB 46.
- 20.6 The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required Performance Security.
- 20.7 The Bid Security may be forfeited:
  - (a) If a Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Letter of Bid, or any extension thereto provided by the Bidder; or
  - (b) If the successful Bidder fails to:
    - (i) Sign the Contract in accordance with ITB 45; or
    - (ii) Furnish a Performance Security in accordance with ITB 46.

20.8 The Bid Security of a JV shall be in the name of the JV that submits the Bid. If the JV has not been legally constituted into a legally enforceable JV at the time of bidding, the Bid Security shall be in the names of all future members as named in the letter of intent referred to in ITB 4.1 and ITB 11.2.

## 21. Format and Signing of Bid

- 21.1 The Bidder shall prepare one original each of the Technical Bid and the Financial Bid comprising the documents as described in ITB 11 and clearly mark them "Original." Alternative Bids, if permitted in accordance with ITB 13, shall be clearly marked "Alternative." In addition, the Bidder shall submit copies of the Technical Bid and the Financial Bid, in the number specified in the **BDS** and clearly mark them "Copy." In the event of any discrepancy between the original and the copies, the original shall prevail.
- 21.2 The original and all copies of the Technical Bid and the Financial Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the **BDS** and shall be attached to the Technical Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Technical Bid and the Financial Bid where entries or amendments have been made shall be signed or initialed by the person signing the Technical Bid and the Financial Bid. If the person signing on behalf of the Bidder is the owner, member, or director of the Bidder, if the Bidder is a single entity, or of the Bidder's Lead Member, if the Bidder is a JV, as demonstrated in the Bidder's Application, then no authorization shall be required.
- 21.3 In case the Bidder is a JV, the Technical Bid and Financial Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives. If the JV has not been legally constituted into a legally enforceable JV at the time of bidding, then the Technical Bid and Financial Bid shall be signed by every member of the proposed JV.
- 21.4 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Technical Bid and the Financial Bid.

### D. SUBMISSION AND OPENING OF BIDS

## 22. Sealing and Marking of Bids

22.1 The Technical Bid and the Financial Bid are to be submitted simultaneously in two separate envelopes (two-envelope procedure).

### (a) **TECHNICAL BID**

The Bidder shall enclose the original and all copies of the Technical Bid in separate sealed envelopes, duly marking the envelopes as "Technical Bid - Original", "Technical Bid - Alternative" and "Technical Bid - Copy."

These envelopes containing the original and the copies shall then be enclosed in one single envelope marked "Technical Bid".

#### (b) FINANCIAL BID

The Bidder shall enclose the original and all copies of the Bid, including alternative Bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as "Financial Bid - Original", "Financial Bid - Alternative" and "Financial Bid - Copy."

These envelopes containing the original and the copies shall then be enclosed in one single envelope marked "Financial Bid".

- 22.2 The inner and outer envelopes shall:
  - (a) Bear the name and address of the Bidder
  - (b) Be addressed to the Employer in accordance with ITB 22.1
  - (c) Bear the specific identification of this bidding process specified in the **BDS** 1.1; and
  - (d) Bear a warning not to open before the time and date for Bid opening (first public opening).
- 22.3 If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the Technical Bid and Financial Bid.

### 23. Deadline for Submission of Bids

23.1 Bids must be received by the Employer in accordance with the instructions, including the address and deadline, specified in the **BDS**.

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

## 24. Late Submissions

24.1 The Employer shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 23. Any Bid received by the Employer after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

### 25. Withdrawal, Substitution, and Modification of Bids

- 25.1 A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 21.2. The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be:
  - (a) Prepared and submitted in accordance with ITB 21 and ITB 22 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "Withdrawal", "Substitution", "Modification"; and
  - (b) Received by the Employer prior to the deadline prescribed for submission of Bids, in accordance with ITB 23.
- 25.2 Bids requested to be withdrawn in accordance with ITB 25.1 shall be returned unopened to the Bidders.
- 25.3 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Technical Bid or any extension thereof.

### 26. Bid Opening

26.1 First Public Session

In the first public session, only the Bidders' Technical Bids will be opened. Financial Bids of qualified Bidders will be opened at the second public session as specified in ITB 26.7.

Except in the cases specified in ITB 24 and 25, the Employer shall publicly open and read out in accordance with ITB 26 all Technical Bids received by the deadline (regardless of the number of Technical Bids received), at the date, time and place specified in the **BDS**, in public and in the presence of Bidders` designated representatives.

26.2 First, envelopes marked "Withdrawal" shall be opened and read out and the envelope with the corresponding Technical Bid and Financial Bid shall not be opened but returned to the Bidder. No Technical Bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at the

Technical Bid opening. Next, envelopes marked "Substitution" shall be opened and read out and exchanged with the corresponding Technical Bid and/or Financial Bid being substituted, and the substituted Technical Bid and/or Financial Bid shall not be opened but returned to the Bidder. No Technical Bid and/or Financial Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at the Technical Bid opening. Envelopes marked "Modification" shall be opened and read out with the corresponding Technical Bid and/or Financial Bid. No Technical Bid and/or Financial Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at the Technical Bid opening. Only Technical Bids that are opened and read out at Technical Bid opening shall be considered further.

- 26.3 In the first public session only the Technical Bids will be opened and examined for completeness and fulfilment of the responsiveness criteria specified in ITB 27.1. The Technical Bids will be evaluated according to the criteria specified under ITB 27.
- 26.4 The Employer shall prepare a record of the Technical Bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; Power of Attorney, nominating the Bidder's authorized representative, and Declaration of Undertaking. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.
- 26.5 The Employer shall notify all Bidders in writing of the names of those Bidders whose Technical Bids have achieved the minimum technical evaluation score. In addition, those Bidders who have been disqualified will be informed separately.
- 26.6 Those Bidders whose Technical Bids have achieved the minimum technical evaluation score will be informed by the Employer of the date, time and place of the second public session for the opening of the Financial Bids.
- 26.7 Second Public Session

Only the Financial Bids of those Bidders whose Technical Bids have achieved the minimum technical evaluation score will be opened in the second public session. The envelopes of those Bidders who have achieved the minimum technical evaluation score shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the technical evaluation score; the total Financial Bid Price, per lot (contract) if applicable, including any discounts and alternative Financial Bids; the presence or absence of a signed Letter of Financial Bid and any other details as the Employer may consider appropriate. Only discounts and alternative Financial Bids read out at the Financial Bid

opening shall be considered for evaluation. The Letter of Financial Bid and the Schedules are to be initialed by a minimum of three representatives of the Employer attending bid opening. At the Financial Bid opening, the Employer shall neither discuss the merits of any Financial Bid nor reject any Financial Bid

26.8 The Employer shall prepare a record of the Financial Bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; the Financial Bid Price, per lot (contract) if applicable, including any discounts and alternative Financial Bids; the presence or absence of a Bid Security, signed Letter of Bid, Power of Attorney, nominating the Bidder's authorized representative, and Declaration of Undertaking.

The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

### E. EVALUATION OF TECHNICAL BIDS

## 27. Determination of Responsiveness of Technical Bids

- 27.1 The Employer will examine the Technical Bids to determine whether they are complete, whether the documents have been properly signed and whether the bids are generally in order. Any bids found to be non-responsive or not meeting the minimum levels of the performance or other criteria specified in the bidding document will be rejected by the Employer and not included for further consideration. The Employer will also carry out a preliminary examination of any alternative bids submitted by bidders.
- 27.2 The Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial omissions in the Technical Bid related to documentation requirements. Failure of the Bidder to comply with the request may result in the rejection of its Technical Bid.
- 27.3 Notwithstanding ITB 27.2, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it shall do so in writing.

## 28. Evaluation of Technical Bids

28.1 The Employer will carry out a detailed evaluation of the Technical Bids not previously rejected in order to determine whether the technical aspects are in compliance with the Bidding Document. The bid that does not meet minimum acceptable standards of completeness, consistency and detail, and the specified minimum (or maximum, as the case may be) requirements for specified functional guarantees, will be rejected for non-responsiveness. In order to reach such a

- determination, the Employer will examine and compare the Technical Bids on the basis of the information supplied by the bidders, taking into account the following:
- (a) overall completeness and compliance with all the requirements of Section VII, Employer's Requirements; the technical merits of alternatives offered; conformity of the Plant and Installation Services offered with specified performance criteria, including conformity with the specified minimum (or maximum, as the case may be) requirement corresponding to each functional guarantee, as indicated in the Specification and in Section III Evaluation and Qualification Criteria; suitability of the Plant and Installation Services offered in relation to the environmental and climatic conditions prevailing at the site; and quality, function and operation of any process control concept included in the bid;
- (b) compliance with the Time for Completion called for in the Contract Data and any alternative time schedules offered by bidders, as evidenced by a milestone schedule provided in the Technical Bid
- (c) type, quantity and long-term availability of mandatory and recommended spare parts and maintenance services
- (d) other relevant factors, if any, listed in Section III, Evaluation and Qualification Criteria; and
- (e) any deviations to the commercial and contractual provisions stipulated in the bidding documents.
- 28.2 The Technical Bids will be subject to evaluation by a points system in accordance with Section III, Evaluation and Qualification Criteria, 1.2 Technical Bid Evaluation System.
- 28.3 The BDS provides details of the technical evaluation such as technical pass / fail criteria, minimum or maximum technical performance criteria, factors for adjustment of the Financial Bid price for over or underachievement of given technical parameters or given completion time etc. In case of a combined scoring system for the Technical and the Financial Bids, the BDS provides the details of the weighting of both parts of the Bid and the calculation scheme.
- 28.4 Where alternative technical solutions have been allowed in accordance with ITB 13, and offered by the Bidder, the Employer will make a similar evaluation of the alternatives. Where alternatives have not been allowed, but have been offered, they shall be ignored.

### 29. Eligibility and Qualification of the Bidder

29.1 The Employer shall determine to its satisfaction whether Bidders determined as having submitted responsive and technically compliant Technical Bids are eligible and continue to meet the qualification criteria specified in Section III, Evaluation and Qualification Criteria.

- 29.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 15, and on any additional information, which the Employer may request from the Bidder to support such evidence.
- 29.3 An affirmative determination will be a prerequisite for the opening of the Bidder's Financial Bid by the Employer. A negative determination will result in rejection of the Bidder's Technical Bid.
- 29.4 The capabilities of the manufacturers and subcontractors proposed to be used by the Bidders for Employer-identified major items of supply or services will also be evaluated for acceptability in accordance with Section III, Evaluation and Qualification Criteria. Their participation shall be confirmed with a letter of intent between the parties, as needed. Should a manufacturer or subcontractor be determined to be unacceptable for justified reasons, the Bid will not be rejected, but the Bidder will be required to substitute an acceptable manufacturer or subcontractor without any change to the bid price. Prior to signing the Contract, the corresponding Schedules shall be completed, listing the approved manufacturers or subcontractors for each item concerned.

## 30. Clarification of Technical Bids

30.1 To assist in the examination, evaluation, and comparison of the Technical Bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its bid. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing.

No change, including any voluntary increase or decrease in the substance of the Bid shall be sought, offered, or permitted, except to rectify nonmaterial omissions.

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

## 31. Invitation to 2nd Public Session for Opening of Financial Bids

- 31.1 In regard to all Bidders, the Employer will either:
  - (a) notify the Bidder, whose Technical Bid is substantially responsive, of the date, time and place of the second public session for the opening of the Financial Bids, or
  - (b) notify the Bidder that its bid has been rejected on the grounds of being substantially non-responsive, or that the Bidder does not meet the minimum qualification requirements set forth in the Bidding Document.

### F. EVALUATION AND COMPARISON OF FINANCIAL BIDS

### 32. Confidentiality

32.1 Information relating to the examination, evaluation, and comparison of the Technical and Financial Bids, and

- recommendation of contract award shall not be disclosed to Bidders, or any other persons not officially concerned with the bidding process until information on Contract award is communicated to all Bidders in accordance with ITB 44.
- 32.2 Any attempt by a Bidder to influence the Employer in the examination, evaluation, and comparison of the Technical and Financial Bids, and qualification of the Bidders, or Contract award decisions may result in the rejection of its Bid.
- 32.3 Notwithstanding ITB 32.2, from the time of the Technical Bid opening to the time of Contract award, if a Bidder wishes to contact the Employer on any matter related to the bidding process, it shall do so in writing.

## 33. Clarification of Financial Bids

- 33.1 To assist in the examination, evaluation, and comparison of the Financial Bids, the Employer may, at its discretion, ask any Bidder for a clarification of its Financial Bid, given a reasonable time for a response. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids, in accordance with ITB 37.1.
- 33.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its Bid may be rejected.

### 34. Deviations, Reservations, and Omissions

- 34.1 During the evaluation of Bids, the following definitions apply:
  - (a) "Deviation" is a departure from the requirements specified in the Bidding Documents
  - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Documents; and
  - (c) "Omission" is the failure to submit part, or all of the information or documentation required in the Bidding Documents.

## 35. Determination of Responsiveness

- 35.1 The Employer's determination of a Financial Bid's responsiveness is to be based on the contents of the Financial Bid itself, as defined in ITB11.1(b)
- 35.2 A substantially responsive Financial Bid is one that meets the requirements of the Bidding Documents without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,
  - (a) If accepted, would:

- Affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
- (ii) Limit in any substantial way, inconsistent with the Bidding Documents, the Employer's rights or the Bidder's obligations under the proposed Contract; or
- (b) If rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Financial Bids.
- 35.3 If a Financial Bid is not substantially responsive to the requirements of the Bidding Documents, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

## 36. Nonmaterial Nonconformities

- 36.1 Provided that a Financial Bid is substantially responsive, the Employer may waive any nonconformities in the Financial Bid that do not constitute a material deviation, reservation or omission.
- 36.2 Provided that a Financial Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Financial Bid. Failure of the Bidder to comply with the request may result in the rejection of its Financial Bid.
- 36.3 Provided that a Financial Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component.

## 37. Correction of Arithmetical Errors

- 37.1 Provided that the Financial Bid is substantially responsive, the Employer shall correct arithmetical errors on the following basis:
  - (a) where there are errors between the total of the amounts given under the column for the price breakdown and the amount given under the Total Price, the former shall prevail, and the latter will be corrected accordingly
  - (b) where there are errors between the total of the amounts of Schedule Nos. I to V and the amount given in Schedule No. VI (Grand Summary), the former shall prevail, and the latter will be corrected accordingly and
  - (c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

- 37.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 37.1 shall result in the rejection of the Financial Bid.
- 38. Conversion to Single Currency
- 38.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted into a single currency as specified in the **BDS**.
- 39. Margin of Preference
- 39.1 Unless otherwise specified in the **BDS**, a margin of preference for domestic Bidders shall not apply.

## 40. Evaluation of Financial Bids

- 40.1 The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.
- 40.2 To evaluate a Financial Bid, the Employer shall consider the following:
  - (a) The Financial Bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Price Schedules
  - (b) Price adjustment for correction of arithmetic errors in accordance with ITB 37.1
  - (c) Price adjustment due to discounts offered in accordance with ITB 17.10
  - (d) Price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 36.3
  - (e) Converting the amount resulting from applying (a) to (d) above, if relevant, to a single currency in accordance with ITB 38
  - (f) The additional evaluation factors as specified in Section III, Evaluation and Qualification Criteria.
- 40.3 If price adjustment is allowed in accordance with ITB 17.7, the estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Financial Bid evaluation.
- 40.4 If these Bidding Documents allow Bidders to quote separate prices for different lots (contracts), and the award to a single Bidder of multiple lots (contracts), the methodology to determine the lowest evaluated price of the lot (contract) combinations, including any discounts offered in the Letter of Financial Bid, is specified in Section III, Evaluation and Qualification Criteria.
- 40.5 If the Financial Bid, which results in the lowest Evaluated Financial Bid Price, is significantly lower than the Employer's estimate, the Employer shall require the Bidder to produce detailed price analyses for any or all items of the Schedules, to demonstrate the internal consistency of those prices with the methods and time schedule proposed. If it turns out that the bid price is abnormally low, the Financial Bid shall be declared non-compliant and rejected. If the Bid is seriously unbalanced or front loaded in the opinion of the Employer and after evaluation of the price analyses, taking into

consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

### 41. Comparison of Bids

- 41.1 The Employer shall compare the evaluated prices of all substantially responsive Financial Bids established in accordance with ITB 40.2 to determine the lowest evaluated Bid.
- 41.2 In accordance with ITB 28.3, the BDS will indicate if a combined scoring system for the Technical and the Financial Bids is to be used. In this case, the **BDS** provides the details of the weighting of both parts of the Bid and the calculation scheme.

## to Reject All Bids

42. Employer's Right 42.1 The Employer reserves the right to annul the bidding process and reject all Bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

### G. AWARD OF CONTRACT

### 43. Award Criteria

43.1 Subject to ITB 42.1, the Employer shall award the Contract to the Bidder whose combined Technical and Financial Bid has the highest score and is substantially responsive to the Bidding Documents, provided further that the Bidder is determined to be eligible and qualified to perform the Contract satisfactorily.

### 44. Notification of Award

- 44.1 Prior to the expiration of the period of Bid validity, the Employer shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called the "Letter of Acceptance") shall specify the sum that the Employer will pay the Contractor in consideration of the execution and completion of the Plant and Installation Services (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price"). Subsequently, the Employer shall also notify all other Bidders of the results of the bidding.
- 44.2 Until a formal contract is prepared and executed, the Letter of Acceptance shall constitute a binding Contract.
- 44.3 The Employer shall promptly respond in writing to any unsuccessful Bidder who, after notification of award in accordance with ITB 44.1, requests in writing the grounds on which its Bid was not selected.
- 44.4 In exceptional circumstances, the Employer may need to communicate with the successful Bidder, established in terms of ITB 39.1, certain aspects of Contract performance prior to sending the Letter of Acceptance. Should such a need arise,

this communication shall be limited to the following topics, as identified in the evaluation report.

- (a) coordination of mobilization timing
- (b) coordination of actions or inputs involving the Employer and the Engineer
- (c) technical alternatives offered by the successful Bidder.

# 45. Signing of Contract

- 45.1 Promptly upon notification, the Employer shall send the successful Bidder the Contract Agreement.
- 45.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.
- 45.3 Notwithstanding ITB 45.2 above, in case signing of the Contract Agreement is prevented by any export restrictions attributable to the Employer, to the country of the Employer, or to the use of the Plant and Installation Services to be supplied, where such export restrictions arise from trade regulations from a country supplying those Plant and Installation Services.

the Bidder shall not be bound by its bid, always provided, however, that the Bidder can demonstrate to the satisfaction of the Employer and of KfW that signing of the Contact Agreement has not been prevented by any lack of diligence on the part of the Bidder in completing any formalities, including applying for permits, authorizations and licenses necessary for the export of the Plant and Installation Services under the terms of the Contract.

# 46. Performance Security

- 46.1 Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder shall furnish the performance security in accordance with the General Conditions of Contract, subject to ITB 40.5, using for that purpose the Performance Security Form included in Section X, Contract Forms, or another form acceptable to the Employer. If the performance security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country.
- 46.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event, the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.

# **Section II. Bid Data Sheet**

A. Introduction									
ITB 1.1	ITB 1.1 The Employer is: Nepal Electricity Authority (NEA)								
ITB 1.1	The name of the ICB is: Lekhnath Damauli 220 kV Transmission Line Project								
	The identification number of the ICB is: ICB/NEA/LD220KVTLP/Package-A								
	The number and identification of lots (contracts) comprising this ICB is (two) 2; i.e.								
	<ul><li>Package A: Transmission Lines and</li><li>Package B: Substations.</li></ul>								
	The present Bidding Documents is relevant to Package A: Transmission Lines.								
ITB 2.1	The name of the Project is: Lekhnath Damauli 220 kV Transmission Line Project								
ITB 4.1	If the Applicant/Bidder is a state-owned entity, and compete in a Tender Process, the Applicant/Bidder has to certify that he has legal and financial autonomy and that he operates under commercial laws and regulations.								
ITB 4.1 (b)	Maximum number of members in the JV shall be: (two) 2, including Lead Member.								
	B. Bidding Document								
ITB 6.1	The contents of Parts 1, 2 and 3 are revised as follows:								
	PART I - Bidding Procedures								
	Section I. Instructions to Bidders (ITB)								
	Section II. Bid Data Sheet (BDS)								
	Section III. Evaluation and Qualification Criteria								
	Section IV. Bidding Forms								
	Section V. Eligibility Criteria								
	<ul> <li>Section VI. KfW Policy - Corrupt and Fraudulent Practices - Social and Environmental Responsibility</li> </ul>								
	PART II - Employer's Requirements								
	Sub-Section VII-1. Project Description and Scope of Works								
	Sub-Section VII-2. Project Procedures								
	Sub-Section VII-3. General Technical Requirements								
	Sub-Section VII-4. Particular Technical Requirements								
	Sub-Section VII-5. Technical Specification								

	Sub-Section VII-6. Civil Works Requirements and Specifica-
	tions
	Sub-Section VII-7. Environmental and Social Requirements
	Sub-Section VII-8. Technical Data Sheets
	Sub-Section VII-8. Annexes
	PART III - Conditions of Contract and Contract Forms
	Section VIII. General Conditions (GC)
	Section IX. Particular Conditions (PC)
	Section X. Contract Forms
ITB 7.1	For clarification purposes only, the Employer's address is:
	NEPAL ELECTRICITY AUTHORITY (NEA)
	Attention: Mr. Jagadish Sharma Poudel
	Address: Lekhnath Damauli 220 kV Transmission Line Project
	Lekhnath Substation, Badahare, Pokhara Metropolitan city ward no. 27, Kaski, Gondaki Province, Nepal
	Fax: Not applicable
	Electronic mail address: Id220kvtlp@gmail.com
	A copy of each request shall be sent to the Engineer, at the following address:
	FICHTNER GmbH & Co. KG
	Attention: Dr. Pierernesto Gatti
	Address: Sarweystrasse 3, 70191 Stuttgart (Germany)
	Fax: Not Applicable
	Electronic mail address: pierernesto.gatti@fichtner.de
	Requests for clarifications shall be in form of a table, consecutively numbered and with reference to the relevant section of the Bidding Document. Any requested clarification shall be submitted also by email in an editable, Microsoft Office WORD, format.
ITB 7.1	Web page: www.nea.org.np
ITB 7.4	A Pre-Bid Meeting, combined with a site visit to the shall take place on the following date and time, at the following place:  Date: 10 October 2022
	Time: 12:00 noon (Nepal time)
	Place: Lekhnath Damauli 220 kV Transmission Line Project
	Lekhnath Substation, Badahare, Pokhara Metropolitan city ward no. 27, Kaski, Gondaki Province, Nepal
	, , , , , , , , , , , , , , , , , , , ,
	The site visit will be organized by the Employer. The definitive date and place of the site visit will be communicated in due time to the Bidders to make the necessary arrangements, prior to the Pre-bid Meeting.

1						
	Transportation and other logistics must be organized by the Bidders. The costs of visiting the site shall be at the Bidders' own expenses.  Due to the current COVID-19 situation, the Employer may decide to schedule virtual meetings via teleconference if travel restrictions will still be in force. Especially, should the site visit not be possible, the Employer will inform Bidders accordingly and will share further instruction and information.					
ITB 8.2	Web page: www.nea.org.np					
	C. Preparation of Bids					
ITB 10.1	The language of the Bid is English.					
	All correspondence exchange shall be in the English language. Language for translation of supporting documents and printed literature is English.					
ITB 11.1 (a)	The Technical Bid shall include an environmental, social, health and safety (ESHS) Methodology meeting the Employer's Requirements, Sub-Section VII-7 Environmental and Social Requirements.					
	The Bidder shall use the ESHS Methodology Form provided for this purpose in Section IV – Technical Bid.					
	A Bid not comprising an ESHS Methodology shall be rejected.					
ITB 11.1 (a) (xx)	The documents comprising the <b>Technical Bid</b> ( <u>strictly</u> in the order mentioned hereby) are revised as follows:					
	(i) Letter of Technical Bid, in the format provided in Section IV. Bidding Forms (Letter of Technical Bid (Form)), indicating the Bidder's name, address, telephone, fax and email. If the Bidder is an association, the Letter of Technical Bid shall also describe the form of association and list the association members					
	(ii) Bid Security in accordance with ITB 20.1					
	(iii) In the case of a Technical Bid submitted by a JV, a certified copy <sup>3</sup> of <b>JV agreement, or Letter of Intent</b> to enter into a JV including a draft agreement, indicating at least the parts of the Plant to be executed by the respective partners. If the Bidder is not a JV or intended JV, this part shall be indicated by the Bidder as "Not applicable"					

<sup>&</sup>lt;sup>3</sup> A certified copy of an original document is perceived to be a copy bearing an endorsement certifying that this is a true copy to the original document. Such certification shall be provided by a notary or other authorities, as applicable in the country of the Bidder. Certification provided by a notary or other competent authority shall be accompanied by apostille certificate.

- (iv) **Declaration of Undertaking**, in the format provided in Section IV. Bidding Forms (**Declaration of Undertaking (Form)**);
- (v) Written confirmation authorizing the signatory of the Technical Bid and the Financial Bid to commit the Bidder, in accordance with ITB 21.2 and authorizing the representative of the Bidder, designated in accordance with ITB 4.1, to submit the Technical Bid and Financial Bid on behalf of the Bidder. If the Bidder is a JV, the authorization shall be provided by the Representative (or Lead Member), nominated as such in the JV Agreement or in the Declarations of Association, submitted in accordance with ITB 4.1. If the representative of the Bidder is the owner, member or director of the Bidder or the Bidder's Lead Member, if nominated in accordance with ITB 4.1, an authorization shall not be necessary
- (vi) Pre-Bid meeting / Site visit certificate issued by the Employer
- (vii) Bidder's **Post Qualification Documents** in line with Section IV, Bidding Forms, Bidders Qualification. **This shall be submitted as separate book.**
- (viii) **Organization Chart**, in line with the instructions provided in Section IV. Bidding Forms **(Organization Chart)**
- (ix) Environmental, Social, Health and Safety Methodology (ESHS Methodology), in accordance with the requirements of Sub-Section VII-7. Environmental and Social Requirements. A Bid not including an ESHS Methodology shall be rejected.
- (x) **Method Statement** as per Section IV. Bidding Forms
- (xi) **Mobilization Schedule** as per Section IV. Bidding Forms
- (xii) **Time Schedule** as per Section IV. Bidding Forms **(Construction Schedule)**; This schedule shall be duly coordinated with the Personnel Schedule and Work Team Schedule
- (xiii) Documentary evidence, established in accordance with ITB 14.1 and ITB 16, that the Plant and Installation Services offered by the Bidder conform to the requirements of the Bidding Document. Especially with regard to conformance with Part 2 - Employer's Requirements, Section IV. Bidding Forms, Plant & Conformity of Facilities shall be observed.
- (xiv) **Personnel schedule** for the whole duration of the Works, for engineering, construction, erection, commissioning and taking over activities, indicating:

- position and name of the personnel (in case of joint venture/consortium, the relevant member shall be explicitly mentioned)
- total number of expatriates and local personnel
- time of minimum stay on site for local and expatriate personnel, including the proposed key personnel
- qualification and experience of expatriates and local personnel.

The schedule shall be established in the format provided in Section IV. Bidding Forms (Personnel Schedule (Form)). This schedule needs to be properly coordinated with the Time Schedule and Work Team Schedule

- (xv) A work team schedule (in form of a histogram) showing the intended deployment of project staff on site during the construction phase. The work team schedule has to mention the number of work teams (multiple work teams are necessary when working in parallel), their task, number & qualification of personnel, transportation of work groups etc.
- (xvi) List of Proposed Suppliers/Manufacturers and subcontractors, in accordance with ITB 16.3; The list shall be generated by the Bidders in the format provided in Section IV. Bidding Forms (Proposed Suppliers/Manufacturers and Subcontractors for Major Items of Plant and Installation Services (Form)). Reference Lists and Supplier's/Manufacturer's or Subcontractor's Authorization (in the format provided in Supplier's/Manufacturer's or Subcontractor's Authorization (Form)) shall be submitted along with the List.
- (xvii) Contractor's Equipment as per Section IV. Bidding Forms, using the form provided thereby (Contractor's Equipment (Form))
- (xviii) Description of proposed Personnel as per Section IV. Bidding Forms (Personnel Forms), using the forms provided thereby, i.e. Forms PER-1 Proposed Personnel and PER-2 Resume of Personnel;
- (xix) An environmental, social, health and safety (ESHS) Methodology meeting the requirements of the ESMMP (Part II, Employer's Requirements, Sub-Section VII-7 Environmental and Social Requirements
- (xx) List of deviations in line with ITB 28.1 and as per the format and requirements provided in Section IV. Bidding Forms (List of Deviations (Form))

Technical Bids are **unpriced** bids and shall contain no prices or price schedules or other reference to rates and prices for completing the facilities. **Technical Bids containing price information will be rejected.** 

ITB 11.1 (b) (ii)	Subject to ITB 11.1 (b) (ii) The price schedules (Price Sheets) shall be also submitted in workable format (MS Excel) on USB stick.								
	Prices shall be stated in whole numbers of USD and NPR.								
	By filling out the Excel Sheets, the option "Precision as displayed" shall be activated in order to avoid arithmetical errors.								
ITB 11.1 (b) (iii)	Not Applicable.								
	Note: The Bid Security shall be submitted as part of the Technical Bid, as mentioned above BDS, ITB 11.1 (a)(ii).								
ITB 11.1 (b) (v)	The Bidder shall submit with its Financial Bid the following additional documents:								
	(v) List of Deviations with cost impact, in line with ITB 28.1 and as per the format and requirements provided in Section IV. Bidding Forms (List of Deviations and Cost Impact)								
ITB 13.1	Alternative Bids <i>shall not</i> be permitted under ITB 13.2 / ITB 13.4								
ITB 15.1	Delete ITB 15.1 and replace with following:								
	To establish its eligibility and qualifications to perform the Contract in accordance with Section III, Evaluation and Qualification Criteria, the Bidder shall also provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms, Bidder's Post Qualification.								
ITB 17.1	Bidders shall quote for the following components or services on a single responsibility basis.								
	Lekhnath Damauli 220 kV Transmission Line Project Package A: Transmission Line								
ITB 17.5 (a)	Named place of destination is: CIP Border								
	According to the latest version of Incoterms								
ITB 17.5 (d)	Named place of final destination is: Nepal job sites								
ITB 17.7	The prices quoted by the Bidder shall be: <i>fixed</i> .  Price Adjustment shall apply for the Tower material and Phase Conductors only in accordance with the Bidding Document Section IV.								
ITB 17.12	With regard to Taxes and Duties the conditions mentioned in Part III, Sub-Clause 14.16 shall be duly considered by the Bidders.								
ITB 18.1	The currency of the Bid and the payment currency shall be as follows:								

	Bidders shall quote International Portion Price Schedule I and III in <b>USD</b> and Local Portion Price Schedule II, IV and V in <b>NPR (Nepalese Rupee)</b> .						
ITB 19.1	The bid validity period shall be 180 days.						
ITB 20.1	he amount and currency of the Bid Security shall be: 650,000.00						
ITB 21.1	addition to the originals of the Technical and Financial Bids, the mber of copies is: <i>two (2)</i> paper copies, each including one (1) jital copy (USB). In the digital copy of the Bid, the length of the file th shall be limited to 120 characters.						
ITB 21.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of:						
	A power of attorney established in the name of the signatory of the Bid. If the Bidder is a JV, the power of attorney shall be issued by the Lead Member of the JV.						
	D. Submission and Opening of Bids						
ITB 23.1	The Bid shall be submitted not later than Date: 14 November 2022						
	Time: 12:00 noon (Nepal Time)						
	at the following address, which shall be the controlling address for the purposes of the timely submission of the Bid:						
	NEPAL ELECTRICITY AUTHORITY (NEA),						
	Attention: Mr. Jagadish Sharma Poudel						
	Address: Lekhnath Damauli 220 kV Transmission Line Project						
	Lekhnath Substation, Badahare, Pokhara Metropolitan city ward no. 27, Kaski, Gondaki Province, Nepal						
	City: Pokhara						
	ZIP Code: 33700						
	Country: Nepal						
	Additional one (1) copy of the Bid shall be submitted at the following address:						
	Fichtner GmbH & Co. KG						
	Attention: Dr. Pierernesto Gatti						
	Address: Sarweystrasse 3 City: Stuttgart						
	ZIP Code: 70191						
	Country: Germany						
ITB 26.1	The Bid opening (first public session) shall take place at:						
	,						

_							
	NEPAL ELECTRICITY AUTHORITY (NEA),						
	Attention: Mr. Jagadish Sharma Poudel						
	Address: Lekhnath Damauli 220 kV Transmission Line Project  Lekhnath Substation, Badahare, Pokhara Metropolitan city ward no						
	Lekhnath Substation, Badahare, Pokhara Metropolitan city ward no. 27, Kaski, Gondaki Province, Nepal						
	27, Kaski, Gondaki Province, Nepal City: <i>Pokhara</i>						
	•						
	ZIP Code: 33700						
	Country: Nepal						
	Date: 14 November 2022						
	Time: 14:00 (Nepal Time)						
	No minimum number of Bids is required in order to proceed to bid opening.						
	E. Evaluation of Technical Bids						
ITB 27.1	At the end of ITB 27.1, add at the end the following:						
	After the preliminary examination, the Employer will examine the						
	Technical Bids whether they are eligible and meet the post qualifica-						
	tion criteria to perform the Contract in accordance with Section III,						
	Evaluation and Qualification Criteria.						
	Any hide found to be not cligible and not qualified, regultantly not						
	Any bids found to be not eligible and not qualified, resultantly not meeting the eligibility and qualification criteria set in the bidding doc-						
	uments, will be rejected by the Employer and not included for further						
	detailed technical evaluation.						
ITB 27.1	The Employer shall reject a Bidder's Technical Bid that is not sub-						
	stantially responsive to the requirements of this bidding document						
ITB 27.1	Compliance of the ESHS Methodology (as specified in BDS 11) with						
	the Environmental and Social Requirements (Section VII - Em-						
	ployer's Requirements) shall be determined by using the method specified in Section III Clause 2. A Bid for which the ESHS Method-						
	ology is not substantially responsive (i.e. without material deviation,						
	reservation or omission) shall be rejected.						
ITB 27.2	The Employer shall evaluate the qualifications of the responsive Bid-						
	ders using the factors, methods, criteria, and requirements defined						
	in Section III, Evaluation and Qualification Criteria, to evaluate the						
	qualifications of the Bidders, and no other methods, criteria, or requirements shall be used.						
	·						
ITB 28.2	The Environmental, Social and Health Safety Criteria (ESHS) (post						
	qualification) will be subject to evaluation by a points system in ac-						
	cordance with Section III, Evaluation and Qualification Criteria.						
ITB 28.3	The Technical and Commercial evaluation will be based on pass						
	/ fail criteria.						
	With Reference to ITB 28.2 above, only the ESHS criteria will be						
	subject to evaluation by point system.						
	•						

	Combined scoring system for the Technical and the Financial Bids to be used: <b>No</b>							
ITB 29.1	Delete ITB 29.1 and replace with following:							
	The Employer shall determine to its satisfaction whether Bidders are eligible and meet the qualification criteria specified in Section III, Evaluation and Qualification Criteria.							
ITB 29.2	At the end of ITB 29.2, add the following paragraph:							
	The evaluation of evidence of qualification focuses solely on the respective Bidder and shall not take into account any qualifications of its subsidiaries, parent entities, affiliates or any other Person different from the Bidder, unless they are associated in the form of a JV with joint and several liability. Exceptionally a Bidder with insufficient financial track regard (e.g. start-up or spin-off companies) can demonstrate its financial qualification by presenting a legally binding letter of comfort of a financially sound parent company (to be demonstrated). For further details, refer to Post Qualification Documents in line with Section IV, Bidding Forms, Bidders Qualification.							
ITB 29.5	Add the following new ITB 29.5:							
	The Employer does not intend to execute any specific elements of the Works by sub-contractors selected in advance by the Employer (nominated sub-contractors/ specialized subcontractor).							
F. Ev	valuation and Comparison of Financial Bids							
ITB 38.1	Prices shall be quoted in USD and NPR only.							
	However, with regard to Qualification Criteria and the relevant provisions of Section III. Evaluation and Qualification Criteria, the publicly available source for exchange rates is: Central Bank of Nepal. The date for the exchange rate shall be 21 days prior to the date of deadline for Bid Submission.							
ITB 39.1	A margin of preference shall not apply.							

## Section III. Evaluation and Qualification Criteria

This Section contains all the criteria that the Employer shall use to verify if the Bidder's meet the post-qualification criteria's and to evaluate the Technical and Financial Bids.

In accordance with ITB 28 and ITB 40, no other factors, methods or criteria shall be used. The Bidder shall provide all the information requested in the forms included in Section IV, Bidding Forms.

Wherever a Bidder is required to state a monetary amount, Bidders should indicate the **USD** equivalent using the rate of exchange determined as follows:

- (a) For construction turnover or financial data required for each year Exchange rate prevailing on the last day of the respective calendar year
- (b) Value of single contract Exchange rate prevailing on the date of the contract signature.

Exchange rates shall be taken from the publicly available source identified in the ITB 38.1. Any error in determining the exchange rates in the Financial Bid may be corrected by the Employer.

#### 1. Post Qualification

#### 1.1 Evaluation Criteria

In line with ITB 15 and ITB 29 the Employer shall determine whether the Bid is eligible and meet the qualification criteria. In this regard, the Employer shall assess each Bid against the following Eligibility and Qualification Criteria. Requirements not included in the text below shall not be used in the evaluation of the Bidder's qualification.

In clause 5 of Evaluation table below, the Environmental and Social and Health and Safety (ESHS) Experience and Capacity requirements are defined, which will be mainly evaluated on the basis of a numeric score. All Sub-criteria (5.1 - 5.7) Scores shall be summed to determine the Bidder's Score with regard to ESHS Criteria. For the purposes of this scoring, the Employer shall apply the following qualitative approach:

- a) 100% of the max. score: Excellent, if the bid substantially exceeds the requirement in accordance with the respective sub-criterion. No errors or omissions are noted.
- b) 75% of the max. score: Good, if the bid meets or marginally exceeds the requirement in accordance with the respective sub-criterion. Minor errors or omissions noted.
- c) 50% of the max. score: Unsatisfactory, if the bid marginally falls short of the requirement in accordance with the respective sub-criterion. Major errors or omissions noted.
- d) 25% of the max. score: Poor, if the bid substantially deviates from or indicates misunderstanding of the requirement in accordance with the respective sub-criterion. Major errors or omissions are noted comprising the fulfilment of the sub-criterion.

e) 0% of the max. score: Insufficient / Fail, if the bid does not meet the requirement at all in accordance with the respective sub-criterion or does not provide any information regarding the requirement.

The Bidder shall be considered responsive for the ESHS Criteria if, the bid scored at least 70 points out of 100 points.

The Bidder shall consider the following: the requirements included in the information and documentation column (Clause 5 Forms) shall be read as minimum requirement to reach 75% of the maximum score for each item.

	Criteria			Requirements / Max. Scores				
			Single Entity		enture (existing or	intended)	Forms	
No.	Subject	Requirement		All Parties Com- bined	Each Member	One Member		
1. Elig	gibility							
1.1	Nationality	Nationality in accordance with ITB 4.3	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI-1.1, 1.2(a) and 1.2(b), with at- tachments	
1.2	Conflict of Interest	No conflicts of interest in accordance with ITB 4.2	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Application Sub-mission Form	
1.3	KfW Eligibility	Not being ineligible for KfW financing, as described in ITB 4.3	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Declaration of Under-taking	
1.4	Government- Owned Entity	Meet conditions of ITB 4.3	Must meet requirement	Must meet re- quirement	Must meet requirement	N/A	Forms ELI-1.1, 1.2(a) and 1.2(b), with at- tachments	
2. His	torical Contract Non-l	Performance						
2.1	History of Non-Per- forming Contracts	Termination of a contract did not occur as a result of contractor's default in the past five (5) years	Must meet requirement	Must meet requirement	Must meet re- quirement	N/A	Form CON-2	
2.2	Suspension Based on Execution of Bid Securing Declaration by the Employer	Not under suspension based on execution of a Bid Securing Declaration pursuant to ITB 4.4	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Application Sub-mission Form	
2.3	Pending Litigation	All pending litigation shall in total not represent more than fifty percent (50%) of the Bidder's net worth and shall be treated as resolved against the Bidder.	Must meet requirement	N/A	Must meet requirement	N/A	Form CON-2	

RNWS7JUM2C5X-1730981799-6457 FICHTNER 49 of 139

	Criteria		Requirements / Max. Scores				Documentation Requirements / Forms	
NI-	Ocale la est	D	Olas alla Fastita	Joint Venture (existing or intended)				
No.	Subject	Subject Requirement	Single Entity	All Parties Com- bined	Each Member	One Member		
3. Fina	3. Financial Situation and Performance							
3.1	Financial Capabilities: Liquidity	(i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as USD 2,500,000.00 for the subject contract(s) net of the Bidders other commitments.	Must meet requirement	Must meet requirement	N/A	N/A	Form FIN–3.1 with attach- ments and FIN-3.3	
3.2	Financial Capabilities: Other Sources of Finance	(ii) The Bidder 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.	Must meet requirement	Must meet requirement	N/A	N/A	Forms FIN–3.1 and FIN-3.4	
3.3	Financial Capabilities: Financial Position	(iii) The audited balance sheets or, if not required by the laws of the Bidder's country, other financial statements acceptable to the Employer, for the last 5 FISCAL years shall be submitted and must demonstrate the current soundness of the Bidder's financial position based on the following criteria:	Must meet requirement	N/A	Must meet requirement	N/A	Form FIN–3.1 with attach- ments	

RNWS7JUM2C5X-1730981799-6457 FICHTNER 50 of 139

	Criteria			Requirements / Max. Scores				
		Joint Venture (existing or intende			r intended)			
No.	Subject	Requirement	Single Entity	All Parties Com- bined	Each Member	One Member		
		a) Liquidity ratio $\geq 1.0$ $\frac{Current\ Assets}{Current\ Liabilities} \geq 1.0$ b) Indebtedness ratio $\leq 85\%$ $\frac{Total\ Liabilities*100}{Total\ Assets} \leq 85\%$						
3.4	Average Annual Construction Turn- over	Minimum annual construction turnover of <b>USD 15,000,000.00</b> for the last <i>5</i> years, calculated as total certified annual payments received for contracts in progress and/or completed	Must meet requirement	Must meet requirement	Must meet [twenty five] [25]% of the requirement	Must meet [sev- enty-five] [75]% of the requirement	Form FIN-3.2	
4. Cor	nstruction Experience							
4.1	General Construction Experience	Experience under construction contracts in the role of prime contractor JV member, for at least the last 10 years, starting 1st January 2012.	Must meet requirement	N/A	Must meet requirement	N/A	Form EXP–4.1	

	Criteria			Requirements / Max. Scores				
				Joint Ve	nture (existing o	rintended)		
No.	Subject	Requirement	Single Entity	All Parties Com- bined	Each Member	One Member		
4.2 (a)	Specific Construction & Contract Management Experience	Similar <sup>4</sup> contracts, successfully or successfully/substantially <sup>5</sup> completed as a prime contractor or joint venture member <sup>6</sup> , <sup>4</sup> , in at least 3 contracts 220kV or above, between 1st January 2012 and application submission deadline.  • One of the contracts above shall be outside of the Bidder's home country that has been successfully or substantially completed in the similar geographical <sup>7</sup> region or in Asia of minimum value USD 25,000,000.00.  Further, one of the abovementioned contracts or other contracts at 132 kV or 220kV level shall be carried out in Nepal and has been successfully completed of minimum value USD 12,000,000.00.	Must meet requirement	Must meet requirement	Each partner shall provide one contract in Nepal.	In case of an JV, the leading partner shall provide at least two contracts; - One Contract shall be outside of the Bidder's home country and - One Contract shall be carried out in Nepal.	Form EXP-4.2 (a)	

<sup>&</sup>lt;sup>4</sup> The similarity shall be based on the physical size, complexity, methods/technology and/or other characteristics described in Section VII, Scope of Works. Summation of number of small value contracts (less than the value specified under requirement) to meet the overall requirement will not be accepted.

<sup>&</sup>lt;sup>5</sup> Substantial completion shall be based on 80% or more works completed under the contract.

<sup>&</sup>lt;sup>6</sup> For contracts under which the Bidder participated as a joint venture member or sub-contractor, only the Bidder's share above 35% of the Contract amount (Be back to original as agreed 22 July 2022) shall be considered to meet this requirement.

<sup>&</sup>lt;sup>7</sup> Southern Region means the countries listed under "Southern Region" according to the Statistics Division of United Nations https://unstats.un.org/unsd/methodology/m49/

	Criteria			Requirements / Max. Scores				
No.	Subject	Requirement	Single Entity	Joint Ve All Parties Com- bined	nture (existing or Each Member	intended) One Member		
		In addition, the Bidder (in case of JV the leading member) shall provide evidence about local presence in Nepal within the last 5 years. Local presence means, the construction of similar characteristics project at 220 kV or above voltage level. Evidence shall be provided in form of Takin-Over certificates, Employer's Certificates etc.  References can include contracts already referenced under sub-criterion 4.1 above.						
4.2 (b)	Construction Experience in key activities	For the above or any other contracts completed and under implementation as prime contractor or joint venture member on or after the first day of the calendar year during the period stipulated in 4.2(a) above, a minimum construction experience in the following key activities successfully completed8:  At least 3 contracts for preparation of detailed engineering design, supply, delivery, installation, testing	Must meet requirements	Not Applicable	Not Applicable	In case of JV the leading partner shall fulfil th is requirement.	Form EXP–4.2 (b)	

<sup>&</sup>lt;sup>8</sup> Volume, number or rate of production of any key activity can be demonstrated in one or more contracts combined if executed during same time period. The rate of production shall be the annual production rate for the key construction activity (or activities).

	Criteria				Documentation Requirements / Forms		
				Joint Ve	enture (existing or	intended)	
No.	Subject	Requirement	Single Entity	All Parties Com- bined	Each Member	One Member	
	Gubject	and commissioning for 220 kV or above Overhead Transmission Lines within last 10 years (i.e. since 1st January 2012 and Bid submission deadline);  One of the above-mentioned contracts shall include the detailed engineering design for multiple circuit towers.  Note: Bidders are required to have In-house design team.  The In-house design team shall be covered by the Bidder and shall be not subcontracted. In case of an JV	Olligic Entity		Each Member	One Member	
		the leading partner shall perform the design of the project and shall provide the In -house design team.					
		The members of the In-house design Team shall be fluent in English (writing/speaking) and available when required in Nepal. The member of design team shall have extensive experience with EN-50341-1					
		All staff will be interviewed in English prior to start of the construction works by the Employer/Engineer					

RNWS7JUM2C5X-1730981799-6457 **FICHTNER** 54 of 139

	C	Criteria		Requiremen	ts / Max. Scores		Documentation Requirements / Forms
					enture (existing o	r intended)	
No.	Subject	Requirement	Single Entity	All Parties Com- bined	Each Member	One Member	
		The Employer/Engineer reserves the right to not approve proposed staff for the In-house design team in case of insufficient English knowledge.					
5. En	/ironmental and Socia	al and Health and Safety (ESHS) E	Experience and	Capacity			
5.1	Certificates	Availability of a valid ISO certification as below or internationally recognized equivalent (equivalence to be demonstrated by the Bidder)  - Quality Management certificate ISO 9001	Must meet requirement	N/A	Must meet requirement, if part in JV is substantial (more than 40 (forty) % of the	Must meet requirement	Form CER-5.1
		- Environmental manage- ment certificate ISO 14001:2014			works)		Form CER-5.1
		- Health and Safety certifi- cate OHSAS 18001 or ISO 45001					Form CER-5.1
5.2	Experience in Projects with significant ESHS Impact	For the above and any other contracts completed and under implementation as prime contractor, joint venture member, management contractor or subcontractor <sup>9</sup> on or	Max. 30 points (For splitting of the points see EXP-5.2)	Max. 30 points <sup>11</sup>	N/A	Must have executed at least 3 contract(s) demonstrating experience with the key ESHS	Form EXP-5.2

<sup>&</sup>lt;sup>9</sup> For contracts under which the Bidder participated as a joint venture member or sub-contractor, only the Bidder's share, by value, shall be considered to meet this requirement.

<sup>&</sup>lt;sup>11</sup>Members will be scored if their part in the JV is substantial (more than 40 (forty) % of the works). Individual member scores will be averaged.

	(	Criteria		Requirement	s / Max. Scores		Documentation Requirements / Forms
					nture (existing o	r intended)	
No.	Subject	Requirement	Single Entity	All Parties Com- bined	Each Member	One Member	
		after the first day of the calendar year during the period stipulated in 4.2(a) above, a minimum specific experience relating to the following ESHS requirements <sup>6</sup> :  - HSE Management Plan (HSEMP) 10  - Emergency Preparedness and Response Plan  - Waste Management Plan  - Traffic Management Plan  - HSE Management System for construction phase  - Worker Accommodation Plan  - Community Health and Safety Plan  - HSE Control Plan for Subcontractors				requirements as listed in the Requirements column.	
5.3	Environmental Capacity	The Bidder must demonstrate that its business setup and operations meet the minimum requirements towards an effective environmental management system:  The qualitative assessment of the Bidder's compliance will be carried out in terms of the scoring method described in Section III Evaluation and Qualification Criteria of Bids. The sub-criterion score will be	Max. 10 points (For splitting of the points see ENV-5.3)	Max. 10 points <sup>7</sup>	N/A	N/A	Form ENV-5.3

<sup>&</sup>lt;sup>10</sup> HSEMP shall fulfill all requirements of the PA-ESMP, as provided in Section VII

	C	riteria		Requiremen	ts / Max. Scores		Documentation Requirements / Forms
					enture (existing or	intended)	
No.	Subject	Requirement	Single Entity	All Parties Com- bined	Each Member	One Member	
		calculated by adding the requirement scores.					
5.4	Occupational Health and Safety Capacity	The Bidder must demonstrate that its business setup and operations meet the minimum requirements towards an effective health and safety management system.  For assessment and scoring see note in 5.3. above.	Max. 10 points (For splitting of the points see OHSAS-5.4)	Max. 10 points <sup>12</sup>	N/A	N/A	Form OHSAS- 5.4
5.5	Socially Responsible Work Implementation	The Bidder must demonstrate a comprehensive understanding of the requirements regarding work site implementation and operation  For assessment and scoring see	Max. 20 points (For splitting of the points see LOC-5.5)	Max. 20 points <sup>8</sup>	N/A	N/A	Form LOC-5.5
5.6 a)	ILO Core Labor Standards	note in 5.3. above Undertaking to fully respect the ILO Core Labor Standards in the Bidder's business practice	Must meet requirement	N/A	Must meet requirement	N/A	Application Sub-mission Form (f) and form COC-5.6
5.6 b)	Ethical business principles	The Bidder must demonstrate that its business setup and operations meet the minimum requirements towards ethical Business principles.  For assessment and scoring see	Max. 10 points (For splitting of the points see COC-5.6)	Max. 10 points <sup>8</sup>	N/A	N/A	Form COC-5.6

<sup>12</sup> Members will be scored if their part in the JV is substantial (more than 40 (forty) % of the works). Individual member scores will be averaged.

	Criteria			Documentation Requirements / Forms			
				Joint Ve	nture (existing or	intended)	
No.	Subject	Requirement	Single Entity	All Parties Com- bined	Each Member	One Member	
		note in 5.3. above.					
5.7	ESHS and Construction Personnel	The Bidder must demonstrate that it has access to adequate candidates for the ESHS personnel profiles, listed in Section IV, Forms ESHS Personnel. The candidates must fulfill the minimum specific profile requirements and the general requirements (if any). Combining several candidates to fulfill one candidate profile is not allowed. Providing multiple candidates for a single profile is allowed. For assessment and scoring see note in 5.3. above.	Max. 20 points (For splitting of the points see PER-5.7)	Max. 20 points	N/A	N/A	PER-5.7

#### 2. Technical Evaluation of Bids

#### 2.1 Evaluation

The Technical Bid shall be evaluated on the basis of pass/fail system. It will thus be controlled whether the Technical Bid is substantially responsive (i.e. without any material deviation, as the latter is defined in ITB 35.2) to the technical requirements of the Bidding Document.

Technical Bids which are deemed not to be substantially responsive will be excluded from further evaluation.

In addition to the criteria listed in ITB 28.1 (a) - (c) the following factors shall apply:

### (a) Evaluation of the plan to mobilize key equipment and key personnel

# (b) Assessment of adequacy of the Environmental, Social, Health and Safety (ESHS) Methodology

The ESHS Methodology submitted by the Bidder shall be evaluated to determine whether it is substantially responsive (i.e. without material deviation, reservation or omission) to the requirements specified in Section VII, Employer's Requirements - Environmental and Social Requirements. The Bidder shall use the ESHS Methodology Form provided for this purpose in Section IV, Bidding Forms. A Technical Bid not comprising an ESHS Methodology or a Technical Bid for which the ESHS Methodology is not substantially responsive (i.e. with material deviation, reservation or omission) shall be rejected.

#### (c) Subcontractors/manufacturers

In case a Bidder intends to use suppliers/manufacturers and/or subcontractors for items of supply or works under the Contract, the Bidder shall specify the names and qualifications of such nominated suppliers/manufacturers and subcontractors by means of the relevant Form - Proposed Suppliers/Manufacturers and Subcontractors for Major Items of Plant and Installation Services incl. Section IV, Bidding Forms.

The conformity of the proposed suppliers/manufacturers and subcontractors shall be established by reviewing all documentary evidence (such as reference lists, end-user certificates, type test reports, drawings, manufacturers' authorization forms etc.) submitted by the Bidder in accordance with **Form - Plant & Conformity of Facilities**.

The Bidder is free to nominate up to three (3) suppliers/manufacturers and subcontractors per item.

Should a subcontractor/ manufacturer be determined to be unqualified or otherwise unacceptable, the application shall not be rejected, but the Bidder shall be requested to substitute with an acceptable subcontractor/ manufacturer prior to Contract award.

The Bidder is responsible for ensuring that the proposed suppliers/manufacturers and subcontractors comply with the requirements of ITB 4 and 5.

The Bidder shall consider the possible amount of subcontracting as stipulated in Part III, PC Sub-Clause 4.4.

Failure to comply with this requirement will result in the rejection of the subcontractor/ manufacturer.

### (d) Personnel Capabilities

Item	Position	Total Experience (years)	Experience in Similar Position in Similar Works <sup>13</sup> (years)
1	Project Manager	10	7
2	Construction Site Manager	10	7
3	Construction Site Supervisor	10	7
4	QA/QC Manager	10	5
5	Procurement Manager	10	5
6	Transmission Line Design Engineer	10	7
7	Telecommunication Specialist	10	7
8	Civil Engineer	10	7
9	Commissioning Manager	10	7
10	Geotechnical Engineer	10	7

The key personnel for the positions mentioned above shall be covered by permanent employees of the Bidder. All key personnel proposed by the Bidder shall be fluent (writing/ speaking) in English.

In case of joint ventures/consortia, the roles of Project Manager, Construction Site Manager and Construction Site Supervisor/s shall be covered by permanent employees of the Lead Member. Violation of this requirement shall not be accepted. In addition to it, Project Manager shall have a qualification of Bachelor of Electrical Engineering plus Master of Engineering or master's in business administration.

All conditionally approved Experts will be interviewed by the Employer/Engineer prior to start of the construction works. Proposed key Experts not sufficiently fluent in the English language (in speaking and writing) will be not approved by the Employer/Engineer and shall be rejected.

### (e) Contractor's equipment

The Bidder shall own, or have assured access to (through hire, lease, purchase agreement for this specific contract, availability of manufacturing equipment, or other means), the key items of equipment in proper condition.

FICHTNER

<sup>&</sup>lt;sup>13</sup> The similarity shall be based on physical size, complexity, methods, technology or other characteristics as described in Part 2 - Employer's Requirements.

	Equipment type and characteristics	Unit	Package A: Trans- mission Lines 220 kV
1.	Pulling-over, braking and conductor recovery plant (min. 6t) good for 220 kV	pcs	1
2.	Tensioner 4t for 220 kV conductors and OPGW	pcs	1
3.	Crane 10t	pcs	1
4.	Metallic derrick 15 t	pcs	1
5.	Crawler tractor with blade (bulldozer) / suitable capacity	pcs	2
6.	Wheeled tractor (80HP) with trailer (3 t)	pcs	2
7.	Excavator	pcs	2
8.	Concrete mixer	pcs	3
9.	Transport truck	pcs	2
10.	Pilot wires for conductors	km	50
11.	Pulley Sets	sets	50
12.	Single pulley for ACS OPGW/ EW	pcs	15
13.	Optical fiber splicing sets	sets	1
14.	Optical Time Domain Reflectometer (OTDR)	pcs	1
15.	Optical power meter (OPM)	pcs	1
16.	220 v a/c stabilized source	pcs	1
17.	Scaffolding equipment for crossing of roads etc.	sets	1
18.	Minibuses for transport of personnel	pcs	4

The Bidder shall provide further details of proposed items of equipment and shall demonstrate that it will have access to all key Contractor's equipment.

#### 3. Financial Bid Evaluation

#### 3.1 Evaluation

In addition to the criteria listed in ITB 40.2 (a) - (e) the following factors and methods will apply:

#### (a) Time Schedule

No credit will be given for early completion.

## (b) Operating and Maintenance Costs

Not Applicable

### (c) Functional Guarantees of the Plant and Installation Services

Not Applicable

(d) Work, services, facilities, etc., to be provided by the Employer

Not Applicable

## (e) Specific additional criteria

Not Applicable

4. Technical alternatives, if invited in accordance with ITB 13.4, will be evaluated as follows:

Technical Alternatives are not permitted.

5. Combined Evaluation System for Technical and Financial Bids

Not Applicable.

# **Section IV. Bidding Forms**

## **Table of Forms**

TECHNICAL BID	65
Letter of Technical Bid	66
Declaration of Undertaking	68
Form of Bid Security	71
QUALIFICATION FORMS	72
Letter of Qualification	73
Form ELI-1.1 BIDDER Information Form	75
Form ELI-1.2 (a) Bidder's JV Information Form	76
Form ELI-1.2 (b) Declaration of Association	77
Form CON-2 Historical Contract Non-Performance, Pending Litigation and Litigation History	78
Form FIN-3.1 Financial Situation and Performance	80
Form FIN-3.2 Average Annual Construction Turnover	82
Form FIN-3.3 Sources of Finance	83
Form FIN-3.4 Current Contract Commitments / Works in Progress	84
Form FIN-3.5 Letter of comfort	85
Form EXP-4.1 General Construction Experience	86
Form EXP-4.2 (a) Specific Construction and Contract Management Experience	ə87
Form EXP-4.2 (b) Construction Experience in Key Activities	89
Form CER-5.1 Certification	91
Form ESHS EXP-5.2 Experience in Projects with significant ESHS Impact	92
Form ENV-5.3 Environmental Management Capacity	94
Form OHSAS-5.4 Occupational Health and Safety Capacity	96
Form LOC-5.5 Socially Responsible Works Implementation	98
Form COC-5.6 Ethical Business Principles	100
Form PER-5.7 List of Available ESHS Personnel	102

OTHER FORMS OF TECHNICAL BID	104
Organization Chart	105
Environmental, Social, Health and Safety Methodology	106
Method Statement	107
Mobilization Schedule	108
Time Schedule	109
Tentative Time Schedule	110
Plant & Conformity of Facilities	111
Contractor's Equipment (Form)	114
Personnel (Forms)	115
Personnel Schedule	116
Form PER-1 Proposed Personnel	117
Form PER-2 Resume of Proposed Personnel	118
Proposed Suppliers/Manufacturers and Subcontractors for Major Items of Plant and Installation Services	119
Supplier's / Manufacturer's or Subcontractor's Authorization (Form)	120
List of Deviations (Form)	121
FINANCIAL BID	122
Preamble / Schedules of Rates and Prices	123
Form of Bid Security Fehler! Textmarke nicht of	definiert.

## **TECHNICAL BID**

## **Letter of Technical Bid**

	e Bidder shall prepare his Letter of Bid on a Letterhead paper specifying his name and Iress]
	Date:ICB No.:
To:	
We	, the undersigned, declare that:
(a)	We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB 8);
(b)	We have no conflict of interest in accordance with ITB 4;
(c)	We have not been suspended nor declared ineligible by the Employer based on execution of a Bid Securing Declaration in the Employer's country in accordance with ITB 4.4;
(d)	We offer to, in conformity with the Bidding Documents, the following Plant and Installation Services:
	,
(e)	Our Bid shall be valid for a period of days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period
(f)	We are not participating, as a Bidder, in more than one Bid in this bidding process in accordance with ITB 4.2(e), other than alternative Bids submitted in accordance with ITE 13
(g)	We understand that this Technical Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed and
(h)	We acknowledge and agree that the Employer reserves the right to annul the bidding process and reject all Bids at any time prior to contract award without thereby incurring any liability to us
(i)	We hereby certify that we have taken steps to ensure that no person acting for us or or our behalf will engage in any type of fraud and corruption.

Name of the Bidder*	
Name of the person duly authorized to sign the Bid o	n behalf of the Bidder**
Title of the person signing the Bid	
Signature of the person named above	
Date signed	_ day of,

<sup>\*:</sup> In the case of the Bid submitted by a JV specify the name of the JV as Bidder

<sup>\*\*:</sup> Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid

## **Declaration of Undertaking**

Reference name of the Application/Offer/Contract:

("Contract")14

To:

("Project Executing Agency")

- 1. We recognise and accept that KfW only finances projects of the Project Executing Agency ("PEA")<sup>15</sup> subject to its own conditions which are set out in the Funding Agreement it has entered into with the PEA. As a matter of consequence, no legal relationship exists between KfW and our company, our Joint Venture, or our Subcontractors under the Contract. The PEA retains exclusive responsibility for the preparation and implementation of the Tender Process and the performance of the Contract.
- 2. We hereby certify that neither we nor any of our board members or legal representatives nor any other member of our Joint Venture including Subcontractors under the Contract are in any of the following situations:
  - 2.1) being bankrupt, wound up or ceasing our activities, having our activities administered by courts, having entered into receivership, reorganisation or being in any analogous situation
  - 2.2) convicted by a final judgement or a final administrative decision or subject to financial sanctions by the United Nations, the European Union or Germany for involvement in a criminal organisation, money laundering, terrorist-related offences, child labour or trafficking in human beings; this criterion of exclusion is also applicable to legal Persons, whose majority of shares are held or factually controlled by natural or legal Persons which themselves are subject to such convictions or sanctions
  - 2.3) having been convicted by a final court decision or a final administrative decision by a court, the European Union, national authorities in the Partner Country or in Germany for Sanctionable Practice in connection with a Tender Process or the performance of a Contract or for an irregularity affecting the EU's financial interests (in the event of such a conviction, the Applicant or Bidder shall attach to this Declaration of Undertaking supporting information showing that this conviction is not relevant in the context of this Contract and that adequate compliance measures have been taken in reaction)
  - 2.4) having been subject, within the past five years to a contract termination fully settled against us for significant or persistent failure to comply with our contractual obligations during such Contract performance, unless this termination was challenged, and dispute resolution is still pending or has not confirmed a full settlement against us
  - 2.5) not having fulfilled applicable fiscal obligations regarding payments of taxes either in the country where we are constituted or the PEA's country
  - 2.6) being subject to an exclusion decision of the World Bank or any other multilateral development bank and being listed on the website http://www.worldbank.org/debarr or respectively on the relevant list of any other multilateral development bank (in the event of such exclusion, the Applicant or Bidder shall attach to this Declaration of Undertaking supporting information showing that this exclusion is not relevant in the context of this Contract and that adequate compliance measures have been taken in reaction); or

\_\_\_

<sup>&</sup>lt;sup>14</sup> Capitalised terms used, but not otherwise defined in this Declaration of Undertaking have the meaning given to such term in KfW's "Guidelines for the Procurement of Consulting Services, Works, Goods, Plant and Non-Consulting Services in Financial Cooperation with Partner Countries".

<sup>&</sup>lt;sup>15</sup> The PEA means the purchaser, the employer, the client, as the case may be, for the procurement of Consulting Services, Works, Plant, Goods or Non-Consulting Services.

- 2.7) being guilty of misrepresentation in supplying the information required as condition to participation in this Tender Procedure.
- 3. We hereby certify that neither we, nor any of the members of our Joint Venture or any of our Subcontractors under the Contract are in any of the following situations of conflict of interest:
  - 3.1) being an affiliate controlled by the PEA or a shareholder controlling the PEA, unless the stemming conflict of interest has been brought to the attention of KfW and resolved to its satisfaction
  - 3.2) having a business or family relationship with a PEA's staff involved in the Tender Process or the supervision of the resulting Contract, unless the stemming conflict of interest has been brought to the attention of KfW and resolved to its satisfaction
  - 3.3) being controlled by or controlling another Applicant or Bidder, or being under common control with another Applicant or Bidder, or receiving from or granting subsidies directly or indirectly to another Applicant or Bidder, having the same legal representative as another Applicant or Bidder, maintaining direct or indirect contacts with another Bidder or Bidder which allows us to have or give access to information contained in the respective Applications or Offers, influencing them or influencing decisions of the PEA;
  - 3.4) being engaged in a Consulting Services activity, which, by its nature, may be in conflict with the assignments that we would carry out for the PEA
  - 3.5) in the case of procurement of Works, Plant or Goods:
    - having prepared or having been associated with a Person who prepared specifications, drawings, calculations and other documentation to be used in the Tender Process of this Contract
    - ii. having been recruited (or being proposed to be recruited) ourselves or any of our affiliates, to carry out works supervision or inspection for this Contract
- 4. If we are a state-owned entity, and compete in a Tender Process, we certify that we have legal and financial autonomy and that we operate under commercial laws and regulations. The legal and financial autonomy needs to be certified by an international auditor.
- 5. We undertake to bring to the attention of the PEA, which will inform KfW, any change in situation with regard to points 2 to 4 here above.
- 6. In the context of the Tender Process and performance of the corresponding Contract:
  - 6.1) neither we nor any of the members of our Joint Venture nor any of our Subcontractors under the Contract have engaged or will engage in any Sanctionable Practice during the Tender Process and in the case of being awarded a Contract will engage in any Sanctionable Practice during the performance of the Contract
  - 6.2) neither we nor any of the members of our Joint Venture or any of our Subcontractors under the Contract shall acquire or supply any equipment nor operate in any sectors under an embargo of the United Nations, the European Union or Germany; and
  - 6.3) we commit ourselves to complying with and ensuring that our Subcontractors and major suppliers under the Contract comply with international environmental and labour standards, consistent with laws and regulations applicable in the country of implementation of the Contract and the fundamental conventions of the International Labour Organisation<sup>16</sup> (ILO) and international environmental treaties. Moreover, we shall implement environmental and social risks mitigation measures when specified in the relevant

<sup>&</sup>lt;sup>16</sup> In case ILO conventions have not been fully ratified or implemented in the Employer's country the Applicant/Bidder/Contractor shall, to the satisfaction of the Employer and KfW, propose and implement appropriate measures in the spirit of the said ILO conventions with respect to a) workers grievances on working conditions and terms of employment, b) child labour, c) forced labour, d) worker's organisations and e) non-discrimination.

environmental and social management plans or other similar documents provided by the PEA and, in any case, implement measures to prevent sexual exploitation and abuse and gender-based violence.

- 7. In the case of being awarded a Contract, we, as well as all members of our Joint Venture partners and Subcontractors under the Contract will, (i) upon request, provide information relating to the Tender Process and the performance of the Contract and (ii) permit the PEA and KfW or an auditor appointed by either of them, and in the case of financing by the European Union also to European institutions having competence under European Union law, to inspect the respective accounts, records and documents, to permit on the spot checks and to ensure access to sites and the respective project.
- 8. In the case of being awarded a Contract, we, as well as all our Joint Venture partners and Subcontractors under the Contract undertake to preserve above mentioned records and documents in accordance with applicable law, but in any case, for at least six years from the date of fulfillment or termination of the Contract. Our financial transactions and financial statements shall be subject to auditing procedures in accordance with applicable law. Furthermore, we accept that our data (including personal data) generated in connection with the preparation and implementation of the Tender Process and the performance of the Contract are stored and processed according to the applicable law by the PEA and KfW.

Name:	In the capacity of:
Duly empowered to sign in the name and on bel	nalf of <sup>17</sup> :
Signature:	Dated:

**FICHTNER** 

<sup>&</sup>lt;sup>17</sup> In the case of a JV, insert the name of the JV. The person who will sign the application, bid or proposal on behalf of the Applicant/Bidder shall attach a power of attorney from the Applicant/Bidder.

# Form of Bid Security

		_
Beı	neficiary:	[Insert name and Address of Purchaser]
Dat	te:	[Insert date of issue]
BID	GUARANTEE No.:	[Insert guarantee reference number]
Gu	arantor: [Insert name and address of pla	ace of issue, unless indicated in the letterhead]
<i>join</i> der exe	at venture shall be the name and addres ") has submitted or will submit to the Ben	and address of the bidder, which in the case of a s of the joint venture] (hereinafter called "the Bidneficiary its bid (hereinafter called "the Bid") for the pontract/brief description of the works] under Inter-B number].
unc <i>gua</i> first	dertake to pay the Beneficiary any sum o arantee amount and currency in words a t demand, supported by the Beneficiary's	Guarantor, hereby irrevocably and independently r sums not exceeding in total an amount of [Insert and figures] upon receipt by us of the Beneficiary's statement, whether in the demand itself or a sepentifying the demand, stating that either the Bidder:
(a)	Has withdrawn its Bid during the period sion Form (the Bid Validity Period"); or	of bid validity set forth in the Bidder's Bid Submis-
(b)	Period, (i) has failed to sign the contrac	of its Bid by the Beneficiary during the Bid Validity t agreement, or (ii) has failed to furnish the perfor- Instructions to Bidders ("ITB") of the Beneficiary's
Thi	s guarantee shall expire not later than [li	nsert expiry date] <sup>18</sup> .
•	this date we must have received any cla ation.	ims for payment by letter or encoded telecommu-
	understood that you will return this guar ount to be claimed hereunder.	antee to us on expiry or after payment of the total
		ules insert <sup>19</sup> : This guarantee is subject to the Uni-2010 Revision, ICC Publication No. 758.]
	Place, date	Guarantor's authorized signature(s)

**FICHTNER** 

<sup>&</sup>lt;sup>18</sup>Pursuant to ITB Clause 19.3 the guarantee must be valid for at least 42 days beyond the bid validity.

<sup>&</sup>lt;sup>19</sup> In the case the issuing bank will not add the preferred option, the following must be added instead: This guarantee is governed by the laws of *[Insert country of jurisdiction]*. Note: the country of jurisdiction shall be the country where the bank's branch issuing the guarantee is physically located.

# **QUALIFICATION FORMS**

#### **Letter of Qualification**

Date: [insert day, month, year] ICB No.: [insert ICB number]

To: [insert full name of Employer]

We, the undersigned, apply to be qualified for the referenced ICB and declare that:

- (a) we have examined and have no reservations to the qualification documents, including Addenda No., issued in accordance with ITB Clause 8: [insert the number and issuing date of each addendum]
- (b) we, including any subcontractors or suppliers for any part of the contract resulting from this qualification process, have nationalities from eligible countries, in accordance with ITB Sub-Clause 4.3: [insert the nationality of the Bidder, including that of all parties in case of a JV, and the nationality of each already identified subcontractor and supplier of related services, if applicable]
- (c) we, including any subcontractors or suppliers for any part of the contract resulting from this qualification do not have any conflict of interest, in accordance with ITB Sub-Clause 4.2
- (d) we, including any subcontractors or suppliers for any part of the contract resulting from this qualification, have not been declared ineligible by KfW, and/or we are not subject to sanction from either Germany, the European Union or the United Nations in accordance with the lists of exclusion established by these institutions regarding fight against terrorism in accordance with ITB Sub-Clause 4.3
- (e) [we are not a government owned entity, **or** we meet the requirements of ITB Sub-Clause 4.1]
- (f) we, including any major subcontractors and suppliers declare that we fully respect ILO Core Labour Standards in our business practice in accordance with ITB Sub-Clause 4.3 and Form COC-5.6
- (g) we, in accordance with ITB Sub-Clause 29.4, plan to subcontract the following key activities and/or parts of the works: [insert any of the key activities identified in Section III- 4.2 which the Bidder intends to subcontract]
- (h) We acknowledge and agree that the Employer reserves the right to annul the bidding process and reject all Bids at any time prior to contract award without thereby incurring any liability to us

Signed [insert signature of the Bidder's representative, authorized in accordance with ITB 4.1, whose name and capacity are shown below]

Name [insert full name of person signing the application]

In the Capacity of [insert legal capacity of person signing the application]

Duly authorized to sign the application for and on behalf of:

Bidder's Name [insert full name of Bidder]

Address [insert street number/town or city/country address]

Dated on [insert day number] day of [insert month], [insert year].

Attachments:

Power of attorney, authorizing the Bidder's representative to act for and on behalf of the Bidder, in accordance with ITB 4.1.

# Form ELI-1.1 Bidder Information Form

		Date:	
		ICB No. and title:	
	Page <sub>-</sub>	of	pages
Bid	idder's name		
[ins	nsert full name]		
In c	case of Joint Venture (JV), name of each member:		
[ins	nsert full name of each member in JV]		
Bid	idder's actual or intended country of registration:		
[ind	ndicate country of Constitution]		
Bid	idder's actual or intended year of constitution:		
[ind	ndicate year of Constitution]		
Bid	idder's legal address [in country of registration]:		
[ins	nsert street/ number/ town or city/ country]		
Bid	idder's legal structure and ownership structure		
Leg	egal structure: [provide details]		
Ow	wnership structure: [provide details of direct and ind	irect ownership]	
Bid	idder's authorized representative information		
Na	ame: [insert full name]		
Add	ddress: [insert street/ number/ town or city/ country	1	
Tel	elephone/Fax numbers: <i>[insert telephone/fax numbe</i>	ers, including country and	city codes]
E-n	-mail address: [indicate e-mail address]		
	General Presentation of the Bidder (name, legal snareholdings, number of staff, etc.)	tructure, business areas,	subsidiaries and
2. /	Attached are copies of original documents of		
	Articles of Incorporation (or equivalent documents uments of registration of the legal entity named about		•
	In case of JV, JV agreement, in accordance with I ELI 1.2(b).	TB 4.1 or Declaration of A	ssociation as per
	<ul> <li>In case of Government-owned enterprise or institution</li> <li>Legal and financial autonomy</li> <li>Operation under commercial law</li> <li>Establishing that the Bidder is not a dependent a</li> </ul>		ITB 4.3 docu-
3. In	Included are the organizational chart, a list of Board	of Directors, and the bene	eficial ownership.

#### Form ELI-1.2 (a) Bidder's JV Information Form

[The following table shall be filled by each member of a JV and, if applicable, by any specialized subcontractor] Date: \_\_\_\_\_ ICB No. and title: \_\_\_\_\_ pages Each Bidder that is a JV Party and each nominated subcontractor in accordance with ITA 29.5 must submit this information. Bidder name: [insert full name] Bidder's JV Member's name: [insert full name of Bidder's JV Member] Bidder's JV Member's country of registration: [indicate country of registration] Bidder JV Member's year of constitution: [indicate year of constitution] Bidder JV Member's legal address in country of constitution: [insert street/ number/ town or city/ country] Bidder JV Member's legal structure and ownership structure: Legal structure: [provide details] Ownership structure: [provide details of direct and indirect ownership] Bidder JV Member's authorized representative information Name: [insert full name] Address: [insert street/ number/ town or city/ country] Telephone/Fax numbers: [insert telephone/fax numbers, including country and city codes] E-mail address: [indicate e-mail address] 1. General Presentation of the Bidder (name, legal structure, business areas, subsidiaries and shareholdings, number of staff, etc.) 2. Attached are copies of original documents of Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITA 4.1. In case of JV, JV agreement, in accordance with ITA 4.1 or Declaration of Association as per ELI 1.2(b). ☐ In case of Government-owned enterprise or institution, in accordance with ITA 4.3 documents establishing: - Legal and financial autonomy - Operation under commercial law

- Establishing that the Bidder is not a dependent agency of the Employer.

3. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

#### Form ELI-1.2 (b) Declaration of Association

[The following form shall be provided by each member of a Joint Venture and, if applicable, by any specialized subcontractor, nominated in accordance with BDS, ITA 29.5]

	Date: _	
	ICB No. and title:	
Page _	of	pages

We hereby declare our intent to associate with the following firms for the purpose of forming a [insert here "joint venture"]:

[Insert the names of the other JV Members here]

[Insert the name of the Lead Member] shall be the Lead Member.

We hereby confirm that we have not associated with any other firms for the purposes of this assignment and that we will not submit an Application separately from the firms listed above. Further, we understand that if one of the above JV Members appears as a member in more than one Application, all Applications in which the Member appears shall be disqualified.

In the event that this JV is awarded a Contract, we shall perform the works in the composition and in the form of cooperation described above.

[Signature of the authorised representative of the Member]

# Form CON-2 Historical Contract Non-Performance, Pending Litigation and Litigation History

[The following table shall be filled in for the Bidder and for each member of a Joint Venture]

Bidder's Name: [insert full name]
Date: [insert day, month, year]
Joint Venture Member Name: [insert full name]
ICB No. and title: [insert ICB number and title]
Page [insert page number] of [insert total number] pages

No	Non-Performed Contracts in accordance with Section III, Qualification and Evaluation							
	☐ Contract non-performance did not occur since 1 <sup>st</sup> January [insert current year number less 5] specified in Section III, Qualification and Evaluation, Sub-Factor 2.1.							
	` '	rmed since 1 <sup>st</sup> January <i>[insert current year number less</i> and Evaluation, requirement 2.1	<i>5]</i> specified in Sec-					
Year	Non- per- formed por- tion of con- tract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and USD equiva- lent)					
[insert year]	-	Contract Identification: [indicate complete contract name/ number, and any other identification]  Name of Employer: [insert full name]	[insert amount]					
		Address of Employer: [insert street/city/country]						
		Reason(s) for non-performance: [indicate main reason(s)]						

D	ending Litigation in acc	cordance with Section III. Qualification and Eval	uation						
· •	g litigation in accordance ed below.	e with Section III, Qualification and Evaluation,	Sub-Factor 2.3 as						
Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency), USD Equivalent (exchange rate)						
[insert year]	[insert amount]	Contract Identification: [indicate complete contract name, number, and any other identification] Name of Employer: [insert full name] Address of Employer: [insert street/city/country] Matter in dispute: [indicate main issues in dispute] Party who initiated the dispute: [indicate "Employer" or "Contractor"] Status of dispute: [Indicate if it is being treated by the Adjudicator, under Arbitration of the line of t	[insert amount]						

tion or being dealt with by the Judiciary]

### Form FIN-3.1 Financial Situation and Performance

[The following table shall be filled in for the Bidder and for each JV Member]

Bidder's Name: [insert full name]
Date: [insert day, month, year]
Joint Venture Member Name:[insert full name]
ICB No. and title: [insert ICB number and title]
Page [insert page number] of [insert total number] pages

#### 1. Financial data

Type of Financial information in	[insert in words]				
(currency)	(amount in	currency, cu		nange rate, l	JSD equiva-
			lent)		
	FISCAL	FISCAL	FISCAL	FISCAL	FISCAL
	Year 1	Year 2	Year 3	Year4	Year 5
Statement of Financial Position	(Information	from Balanc	e Sheet)		
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
	Information	from Income	Statement		
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

#### 2. Financial documents

The Bidder and its parties shall provide copies of financial statements for [number] years pursuant Section III, Qualification and Evaluation, Sub-factor 3.1. The financial statements shall:

- (a) reflect the financial situation of the Bidder or JV member, and not an affiliated entity (such as parent company or subsidiary).
- (b) be independently audited or certified in accordance with local legislation.
- (c) be complete, including all notes to the financial statements.
- (d) correspond to accounting periods already completed and audited.
- ☐ Attached are copies of financial statements<sup>20</sup> for the [number] years required above; and complying with the requirements

**FICHTNER** 

<sup>&</sup>lt;sup>20</sup> If the most recent set of financial statements is for a period earlier than 12 months from the date of application, the reason for this should be justified.

# Form FIN-3.2 Average Annual Construction Turnover

[The following table shall be filled in for the Bidder and for each member of a Joint Venture]

Bidder's Name: [insert full name]
Date: [insert day, month, year]
Joint Venture Member Name:[insert full name]
ICB No. and title: [insert ICB number and title]
Page [insert page number] of [insert total number] pages

Annual turnover data (construction only)						
Year	Amount Currency	Exchange rate	USD equivalent			
[indicate cal- endar year]	[insert amount and indicate currency]	[insert exchange rates used to calculate the USD equivalent]	[insert USD equivalent]			
		Average Annual Construction Turnover *				

<sup>\*</sup> Total USD equivalent for all years divided by the total number of years. See Section III, Qualification and Evaluation, Clause 3.2.

### Form FIN-3.3 Sources of Finance

[The following table shall be filled in for the Bidder and all members combined in case of a Joint Venture]

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

	Financial Resources					
No.	Source of financing	Amount (USD equivalent)				
1						
2						
3						

## Form FIN-3.4 Current Contract Commitments / Works in Progress

[The following table shall be filled in for the Bidder and all members combined in case of a Joint Venture]

Bidders and each member to a JV 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.

	Current Contract Commitments						
No.	Name of Contract	Employer's Contact Address, Tel, Fax	Value of Outstanding Work [Current USD Equivalent]	Estimated Completion Date	Average Monthly Invoicing Over Last Six Months [USD / month)]		
1							
2							
3							
4							
5							

#### Form FIN-3.5 Letter of comfort

The letter of comfort is required only if the Bidder is start-up or spin - off company and can demonstrate its financial qualification by presenting a legally binding letter of comfort of a financially sound parent company, in line with ITA 29.2.

Non-compliance with this will result in rejection of the Bid and disqualification of the Bidder.

### Form EXP-4.1 General Construction Experience

[The following table shall be filled in for the Bidder and in the case of a JV Bidder, each Member]

Bidder's Name: [insert full name]
Date: [insert day, month, year]
Joint Venture Member Name:[insert full name]
ICB No. and title: [insert ICB number and title]
Page [insert page number] of [insert total number] pages

[Identify contracts that demonstrate continuous construction work over the past [number] years pursuant to Section III, Qualification and Evaluation, Sub-Factor 4.1. List contracts chronologically, according to their commencement (starting) dates.]

Starting Year	Ending Year	Contract Identification	Role of Bidder
[indicate year]	[indicate year]	Contract name: [insert full name] Brief Description of the Works performed by the Bidder: [describe works performed briefly] Amount of contract: [insert amount in currency, mention currency used, exchange rate and USD equivalent] Name of Employer: [indicate full name] Address: [indicate street/number/city/country]	[insert "Prime Contractor" or "JV Member" or "Sub- contractor" or "Management Contractor"]
		Contract name: [insert full name] Brief Description of the Works performed by the Bidder: [describe works performed briefly] Amount of contract: [insert amount in currency, mention currency used, exchange rate and USD equivalent] Name of Employer: [indicate full name] Address: [indicate street/number/city/country]	[insert "Prime Contractor" or "JV Member" or "Sub- contractor" or "Management Contractor"]
		Contract name: [insert full name] Brief Description of the Works performed by the Bidder: [describe works performed briefly] Amount of contract: [insert amount in currency, mention currency used, exchange rate and USD equivalent] Name of Employer: [indicate full name] Address: [indicate street/number/city/country]	[insert "Prime Contractor" or "JV Member" or "Sub- contractor" or "Management Contractor"]

# Form EXP-4.2 (a) Specific Construction and Contract Management Experience

[The following table shall be filled in separately for contracts performed by the Bidder or each member of a Joint Venture]

Bidder's Name: [insert full name]
Date: [insert day, month, year]
Joint Venture Member's Name:[insert full name]
ICB No. and title: [insert ICB number and title]
Page [insert page number] of [insert total number] pages

Similar Contract No. [insert number] of [insert number of similar contracts required]						
Contract Identification	[inser	t contract nam	e and number, if app	olicable]		
Award date	[inse	ert day, month,	year, i.e., 15 June 2	2015]		
Completion date	[ins	ert day, month	, year, i.e., 03 Octob	per 2017]		
Role in Contract [check the appropriate box]	Prime Con- tractor □	Member in JV □	Management Contractor	Sub-contrac- tor		
Total Contract Amount	[insert total contract amount in local currency] total contract a equivalent]			•		
If member in a JV or subcontractor, specify participation in total Contract amount	[""	- [insert total contract amount in lo- cal currency]	[insert exchange racontract amount in lent]			
Employer's Name:	[insert full name]					
Address:	[indicate street / number / town or city / country]					
Telephone/fax number	[insert telephone/fax numbers, incl. country/city area codes]					
E-mail:	[insert e-mail address, if available]					

Similar Contract No.  [insert number] of [insert number of similar contracts required]  Description of the similarity in accordance with Sub-Criterion 4.2 of Section III:	
Physical size of required works items	[insert physical size of items]
2. Complexity	[insert description of complexity]
<u> </u>	[insert specific aspects of the methods/technology in- volved in the contract]
Construction rate for key activities	[insert yearly rates and items]
5. Other Characteristics	[insert other characteristics as described in Section VII, Scope of Works]

### Form EXP-4.2 (b) Construction Experience in Key Activities

Bidder's Name: [insert full name]
Date: [insert day, month, year]
Bidder's JV Member's Name: [insert full name]
Subcontractor's Name<sup>21</sup> (as per ITA 29.5): [insert full name]
ICB No. and title: [insert ICB number and title]

Page [insert page number] of [insert total number] pages

1. Key Activity No. One: [insert brief description of the Activity, emphasizing its specificity]

	Information				
Contract Identification	[insert contract name and number, if applicable]				
Award date	[insert day, monti	h, year, i.e., 1	5 June 2015]		
Completion date	[insert day, monti	h, year, i.e., 0	3 October 201	7]	
Role in Contract [check the appropriate box]	Prime Contractor	Member in JV	Management Contractor	Sub-contrac- tor	
Total Contract Amount	contract currency/ies)			t exchange rate ontract amount uivalent]	
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year [Insert extent of participation indicating actual quantity of key activity successfully completed in the role performed]  Year 1	the contract (i)	partio	entage cipation (ii)	Actual Quantity Performed (i) x (ii)	
Year 2					
Year 3					
Year 4					
Employer's Name:		[insert full I	name]		

<sup>&</sup>lt;sup>21</sup> If applicable

	Information
Address:	[indicate street / number / town or city / country]
•	[insert telephone/fax numbers, including country and city area codes]
E-mail:	[insert e-mail address, if available]
Description of the key activities in accordance with Sub-Factor 4.2(b) of Section III:	
	[insert response to inquiry indicated in left column]

- 2. Key Activity No. Two
- 3. Key Activity No. Three

### Form CER-5.1 Certification

Qualification and Evaluation, Criterion	ossession of all certificates as defined in Section III.  No. 5.1. The following table shall be filled in by the ation required.Bidder's Legal Name:  e:
	ICB No.:
Description	Information
Identification of the certificate	[insert full name of the certificate]
First award date	[insert day, month, year of first certificate award]
Last update of the certificate	[insert day, month, year of latest renewal, if any]
Issuers Name	[insert full name]
Address	[insert street / number / town or city / country]
Telephone/fax number	[insert phone/fax no., incl. country & city area codes]
E-mail	[insert e-mail address, if available]
Compliance with international standards	The certificate is [select ISO 9001 / ISO 14001:2004 / OHSAS 18001 or ISO45001]:
	□ Yes / □ No
If no, proof of conformity with the international standard by the Bidder	The Bidder shall demonstrate the equivalency of their management systems with the international standards.

Copies of all certificates as defined in Section III, Item 5, Criterion 5.1 shall be provided.

### Form ESHS EXP-5.2 Experience in Projects with significant ESHS Impact

[The following table shall be filled by the Bidder or in case of a JV the Lead Member. Project references provided here should reflect the ESHS requirements as defined in Section III, 5. If the Bidder is required to demonstrate different ESHS aspects this should be shown separately in the sheet below or in a separate sheet.]

Bidder's Name: [insert full name]
Date: [insert day, month, year]
Joint Venture Member's Name:[insert full name]
ICB No. and title: [insert ICB number and title]
Page [insert page number] of [insert total number] pages

ESHS Contract No. [insert number] of [insert number of S&E contracts required as per Section III, 5.]		Infor	mation	
Contract Identification	[inser	t contract nam	e and number, if app	olicable]
Award date	[inse	ert day, month,	year, i.e., 15 June 2	2015]
Completion date	[inse	ert day, month	, year, i.e., 03 Octob	per 2017]
Role in Contract [check the appropriate box]	Prime Con- tractor □	Member in JV □	Management Contractor □	Sub-contrac- tor
Total Contract Amount	[insert total con local currency]	tract amount in	USD [insert Exchar total contract amou equivalent]	•
If member in a JV or subcontractor, specify participation in total Contract amount	Intoone a por	- [insert total contract amount in lo- cal currency]	[insert exchange racontract amount in lent]	
Employer's Name:	[insert full name	]		
Address:	[indicate street /	/ number / tow	n or city / country]	
Telephone/fax number	[insert telephon	e/fax numbers	, incl. country/city ar	ea codes]
E-mail:	[insert e-mail ac	ldress, if availa	able]	

ESHS Contract No. [insert number] of [insert number of ESHS contracts required as per Section III, 5.]	Information and Documentation
1. ESHS Challenges	[describe the ESHS challenges faced in project imple- mentation, including indication of scales/size by refer- ence, if applicable project E&S categorization as per development bank categorization]
[insert brief description or, if applic	cable, short abstract of the documentation annexed]
2. ESHS measures implemented	[ description of measures implemented, incl. supporting documentation, if available]
[insert brief description or, if applic	cable, short abstract of the documentation annexed]
	[description of know how transfer and capacity building measures implemented, incl. supporting documentation, if available]
[insert brief description or, if applic	cable, short abstract of the documentation annexed]

Maximum points attributed to above requirements:30 \_

(Points will be split in 3 points for requirement 1, 3.5 points each for requirements 2 and 3, and 2.5 points for each of the eight plans listed in Section III, 1.1 Evaluation, Criterion 5.2)

## Form ENV-5.3 Environmental Management Capacity

[The following table shall be filled by the Bidder or each member of a Joint Venture, whose part in the JV is substantial (more than 40 (forty) % of the works)]

Bidder's Legal Name: [insert full name]

Date: [insert day, month, year]

ICB No.: [insert International competitive bidding number]

	The Bidder shall demonstrate:	Information and Documentation	ESHS level
1	the existence of an Environmental Policy	[Provide relevant details of the Corporate Values or similar policy documents and declarations]	<b>0</b>
ins	ert brief description or, if applicable, sl	hort abstract of the documentation a	nnexed
2	<ul> <li>the existence of an Environmental Management System, incl. an ade- quate organizational set-up for def- inition, enforcement and monitor- ing.</li> </ul>	[Provide details of the organiza- tional set-up and procedures for rel- evant issues within your company, for qualification details of relevant key staff see Form PER-5.7]	8
ins	ert brief description or, if applicable, sl	hort abstract of the documentation a	nnexea
3	that all members of a JV, suppliers, subcontractors and temporary workforce a) are aware of and b) comply with the Environmental	[Provide information on a) how awareness, know how transfer and enforcement is implemented to external partners	<b>2</b>
3	subcontractors and temporary workforce a) are aware of and b)	a) how awareness, know how trans- fer and enforcement is implemented	
	subcontractors and temporary workforce a) are aware of and b) comply with the Environmental	a) how awareness, know how transfer and enforcement is implemented to external partners b) nature, content and frequency of internal trainings to employees.]	3

	The Bidder shall demonstrate:	Information and Documentation	ESHS level 3*
5	<ul> <li>that procedures exist to respond to and mitigate environmental emer- gencies and other adverse impacts on work sites.</li> </ul>	[Provide supporting evidence like emergency manuals (index only), emergency procedures, etc.]	3
[ins	ert brief description or, if applicable, sl	nort abstract of the documentation a	nnexed]

Maximum points attributed to above requirements: 10\_

ESHS Level 3: Maximum points attributed to above requirements: 10 points (Points will be split in 1.5 points for requirement 1, 2.25 points each for requirements 2 and 3, and 2 points each for requirements 4 and 5)

Level ● basic = relevant to contracts with basic ESHS requirements

Typically for contracts in Projects with minor environmental and social construction related impacts and risks which do not require an Environmental and Social Impact Assessment (ESIA) and an Environmental and Social Monitoring Plan (ESMP) (Category "C"). During the implementation of the works only limited occupational health and safety measures are required, e. g minor works and small-scale rehabilitation measures; few workers; low transport requirements; no worker camps required; no hazardous wastes; no working at heights or confined spaces; no heavy construction machinery; no external environmental risks like floodings, etc.

Level ● elevated = relevant to contracts with elevated ESHS requirements in addition to ●

Typically for contracts in Projects with limited environmental and social impacts and risks which require a standard ESIA (Category "B"). During the implementation of the works standard occupational health and safety measures are required, e. g. less than 100 workers, less complex work site(s), transport of hazardous material, general OHS risks (welding, hazardous material) etc.

Level 

 high = relevant to contracts with high ESHS requirements in addition to 

 ■

Typically for contracts in Projects with significant or long-term environmental and social impacts and risks which require a separate comprehensive ESIA and an ESMP (Category "B+ and A"). During the implementation of the works particular occupational health and safety measures are required, e.g., more than 100 workers, worker camp(s) required, significant risks at complex work sites(s), increased heavy load traffic, etc.

The Forms include the full set of ESHS requirements for contracts with level • ESHS requirements. However, each individual requirement is marked according to the level on which this requirement applies. For contracts with lower requirements (level • or level •) those requirements which are not applicable should be deleted.]

Projects financed by KfW are categorized in categories A, B+, B or C depending on their adverse environmental and social impacts and risks. This categorization takes place at an early stage and applies to the overall Project. However, typically projects comprise several components and specific individual contracts are awarded to consultants, contractors, firms or suppliers. The categorization of these individual contracts may differ from the categorization of the overall project (e.g. a separate supply contract for computers, or a separate small works contract for the rehabilitation of a guard house etc. may be categorized as minor, whereas the overall project may be a large hydro power project categorized as A).

## Form OHSAS-5.4 Occupational Health and Safety Capacity

[The following table shall be filled by the Bidder or each member of a Joint Venture, whose part in the JV is substantial (more than 40 (forty) % of the works)]

Bidder's Legal Name: [insert full name]
Date: [insert day, month, year]

ICB No.: [International competitive bidding number]

1	The Bidder shall demonstrate:	Information	ESHS level
'	the existence of an Occupa- tional Health & Safety Policy	[Provide a policy document and the index of the Occupational Health & Safety manual or other relevant documents and declarations]	0 2 3
[inse	rt brief description or, if applicable,	short abstract of the documentation annex	red]
2	the existence of management system, incl. an adequate or- ganizational set-up for defini- tion, enforcement and monitor- ing.	[Provide details of the organizational set- up and procedures for health and safety is- sues within your company, for qualification details of relevant key staff see Form PER- 5.7]	3
[inse	rt brief description or, if applicable,	short abstract of the documentation annex	red]
3	that regular reviews, audits and statistics of Health & Safety events and procedures especially on work sites exist.	[Please provide details or samples of risk assessments, reviews, audits or statistical reports which are carried out on a regular basis for the last three years ]	8
[inse	rt brief description or, if applicable,	short abstract of the documentation annex	red]
4	- that all members of a JV, suppliers (in particular those for major supply items), sub-contractors and temporary workforce a) are aware of and b) comply with the Health & Safety Policy.	[Provide information on a) how awareness, know how transfer and enforcement is implemented to external partners b) nature, content and frequency of internal trainings to employees.]	<b>3</b>

	The Bidder shall demonstrate:	Information	ESHS level
[inse	rt brief description or, if applicable,	short abstract of the documentation annex	ed]
	-		

Maximum points attributed to above requirements: 20\_

ESHS Level 3: Maximum points attributed to above requirements: 10 points (Points will be split in 2.5 points for requirement 1, 3.5 points for requirement 2, and 2 points each for requirements 3 and 4)

### Form LOC-5.5 Socially Responsible Works Implementation

[The following table shall be filled by the Bidder or each member of a Joint Venture, whose part in the JV is substantial (more than 40 (forty) % of the works)]

Bidder's Legal Name: [insert full name]

Date: [insert day, month, year]

ICB No.: [insert International competitive bidding number]

	The Bidder shall demonstrate:	Documentation	ESHS level
1	a comprehensive strategy for staff and labor incl. recruit- ment of temporary workforce and local labor, worker griev- ance mechanism, etc.	_[Provide information and relevant documents, if any]	0 2 6
[inse	rt brief description or, if applicable,	short abstract of the documentation annexe	d]
2	a comprehensive strategy for ensuring public health and safety, including programs and procedures to combat the spread of communicable dis- eases (incl. HIV/AIDS).	[Please provide supporting evidence	0 2 3
[inse	rt brief description or, if applicable,	short abstract of the documentation annexed	d]
3	a comprehensive strategy for staff accommodation, e.g. worksite camps, house rental, security, etc.	[Provide information and relevant documents, if any]	8
[inse	rt brief description or, if applicable,	short abstract of the documentation annexe	d]
4	a comprehensive training strategy for transfer of ESHS knowhow to temporary work- force and subcontractors	_[Provide information and relevant documents, if any]	<b>2</b>
[inse	rt brief description or, if applicable,	short abstract of the documentation annexe	d]

	The Bidder shall demonstrate:	Documentation	ESHS level
5	a strategy for communication and interaction with stakeholders and local communities incl. grievance mechanism, incl. avoidance of damage to property and people	[Provide a concept how this relationship has been managed in former contracts.]	3

[insert brief description or, if applicable, short abstract of the documentation annexed]

Maximum points attributed to above requirements: 20\_

ESHS Level 3: Maximum points attributed to above requirements: 20 points (Points will be split in 5 points each for requirements 1 and 2, 3.5 points each for requirements 3 and 4, and 3 points for requirement 5)

### Form COC-5.6 Ethical Business Principles

[The following table shall be filled by the Bidder or each member of a Joint Venture, whose part in the JV is substantial (more than 40 (forty) % of the works)]

Bidder's Legal Name: [insert full name]

Date: [insert day, month, year]

ICB No.: [insert International competitive bidding number]

	The Bidder shall demonstrate:	Documentation	ESHS level
1	<ul> <li>that ILO core labor standards<sup>22</sup> are fully respected in business operations by explicitly ticking the boxes.</li> </ul>	Our business operations respect the core labor standards on:  □ Freedom of Association □ Elimination of Forced Labour □ Non-Discrimination □ Abolishment of Child Labour	Pass/ fail
[insei	rt brief description or, if applicable,	short abstract of the documentation annex	ed]
2	the existence of a declaration on ethical business principles or similar declaration.	[Provide written information and evidence on business principles (code of conduct, conflict of interest, bribery, corruption, bidrigging, unfair competition, insider rules, confidentiality, money-laundering, etc.)]_	3
[insei	rt brief description or, if applicable,	short abstract of the documentation annex	ed]
3	the existence of an adequate organizational set-up to define, enforce and monitor the ethical business principles.	[Provide details of the organizational set- up and staffing of the relevant department, for qualification details of relevant key staff see Form PER-5.7]	3
[inse	rt brief description or, if applicable,	short abstract of the documentation annex	ed]
4	that all members of a JV, suppliers (in particular those for major supply items), subcontractors and temporary workforce a) are aware of and b) comply with these principles.	[Provide information on a) how awareness, know how transfer and enforcement is implemented to external partners  b) nature, content and frequency of internal trainings to employees.]	V <b>3</b>

<sup>&</sup>lt;sup>22</sup> See relevant ILO conventions C087, C098, C029, C105, C100, C111, C138, C182. In case ILO conventions have not been fully ratified or implemented in the Employer's country the Bidder / Bidder / Contractor shall, to the satisfaction of the Employer and KfW, propose and implement appropriate measures in the spirit of the said ILO conventions.

	The Bidder shall demonstrate:	Documentation	ESHS level
[inser	t brief description or, if applicable,	short abstract of the documentation annex	ed]
5	that a confidential and anonymous mechanism for employees and third parties to report violations of the ethical business principles exists.	[Describe the mechanism and the offered reporting channels (ombudsmen, whistle-blower scheme, website, etc.) ]	<b>3</b>
[inser	t brief description or, if applicable,	short abstract of the documentation annex	ed]

Maximum points attributed to above requirements 2 to 5, requirement 1 is pass / fail: 10

ESHS Level 3: Maximum points attributed to above requirements 2 to 5: 10 points (Points will be split in 3 points each for requirements 2 and 3, and 2 points each for requirements 4 and 5)

#### Form PER-5.7 List of Available ESHS Personnel

Complete the list below to demonstrate the extent to which you have access (internally / externally) to ESHS and Construction expertise required for personnel profiles described in Employer's Requirement, Section VII; Environmental and Social Requirements. The Bidder shall attach the CVs as personnel evaluation is carried out at the qualification stage.

Name	Designation, in accord- ance with Section VII, Scope of Works	Educa- tion/ De- gree	Years of Profes- sional Ex- perience	Relation- ship with / Years within the Bidder <sup>23</sup>	Coun- try/Re- gional Ex- perience	Relevant Project References (Description of project-related experience)	Languages
	Environmental and Social, Health and Safety (ESHS) Manager		15				
	Construction Site HSE Manager		7				
	Social and Resettlement Expert		7				

Maximum points attributed to above requirements: 20 points (will be split in 8 points for ESHS Manager and 6 points each for the other two positions)

#### **ESHS Manager**

The Contractor's ESHS Manager shall be responsible for the development and implementation of the project- and site-specific HSE Management Plan, including Occupational Health and Safety.

The ESHS Manager will work closely with the Contractor's Project Manager, advising on the performance of the contractors' (including all subcontractors) compliance with the requirements as provided in the ESMMP and Biodiversity Action Plan (BAP) and set site specific the Health, Safety and Environment Management Plan (HSEMP).

**FICHTNER** 

<sup>&</sup>lt;sup>23</sup> For freelance experts (e.g. with retainer contracts or formal agreements) indicate "FE" and how long the expert has been associated with the Bidder. For sub-consultant staff indicate "Sub". Staff from affiliated firms of the Bidder shall be considered as sub-consultant staff.

The ESHS Manager shall also ensure that all environmental and social as well as occupational health and safety requirements stipulated in the ESMMP, BAP and site specific HSEMP, together with the relevant local laws and regulations and the standards as listed above, are adhered to by the project team/personnel and shall ensure compliance with the same by subcontractors and suppliers.

The ESHS Manger shall be experienced in OHS- on construction sites, especially related to construction of Overhead Transmission Lines.

#### **Construction HSE Manager**

The Construction HSE Manager shall be responsible for the day-to-day implementation of ESMS elements, occupational health and safety management measures and the relevant activities on construction sites. He shall be reporting to the Construction Site Manager and the ESHS Manager. This person shall be establishing regular E&S Performance Reports and shall be in addition reporting on any HSE issues when these occur. Construction HSE Manager shall be fluent in local language (Nepalese)

#### **Social and Resettlement Expert**

Contractor's Social and Resettlement Expert shall be responsible for the communication and interaction with stakeholders, local communities, and Project Affected People. This expert shall supervise implementation of all mitigation / compensation measures defined by the site-specific HSEMP related to the social environment. This shall be done in compliance with the Project's Resettlement Action Plan (RAP) which is prepared by the Implementation Consultant in line with requirements of national and international standards and is implemented by NEA.

Requirements for this expert include: University degree in anthropology / sociology or related disciplines; Experience with conducting environmental & social risk assessments, preferably with a focus on the power / transmission sector. Excellent communication and reporting skills; fluent in English and Nepalese language.

Maximum points attributed to above requirements: 20 \_points

#### OTHER FORMS OF TECHNICAL BID

#### **Organization Chart**

#### Instructions on preparation and submission of Organization Chart

The Bidder shall submit an Organization Chart showing the position of the project manager, site manager, site supervisors, ESHS manager (and site managers), design engineers and other key personnel participating in the project, as well as the main communication lines. The requirements are applicable to both home office and site office personnel.

Organization of multiple work teams for the individual portions of the Works should be visible.

The chart shall show as a minimum the key personnel to be engaged, as required in Section III.

#### **Environmental, Social, Health and Safety Methodology**

The Bidder shall provide an ESHS Methodology, providing information on how the Bidder shall meet those requirements and objectives, which are specified in Part II. Employer's Requirements, Sub-Section VII-7 Environmental and Social Requirements.

In order to address the highly sensitive ESHS issues highlighted during the project's environmental and social impact assessment and in the Biodiversity Action Plan, the ESHS Methodology shall provide detailed information on the management of -at least- the following aspects:

- (a) Project area description (base camps, quarries, borrow pits, storage areas)
- (b) Accommodation, drinking water, meals and transportation of staff
- (c) Local recruitment and ESHS trainings of local staff, ESHS trainings of subcontractors and local partners
- (d) Protection of adjacent areas, prevention of erosion and wastewater management
- (e) Protection of biodiversity (especially related to felling of trees in the OHL corridor and risk of bird collision)
- (f) Access roads, traffic, noise and atmospheric emissions management,
- (g) Waste and hazardous products management
- (h) Vegetation clearing and site rehabilitation
- (i) Relations with stakeholders, information and consultation of local communities and authorities
- (j) Occupational Health and Safety at construction sites and Community Health and Safety

A Bid for which the ESHS Methodology is evaluated as non-substantially responsive (i.e. with material deviation, reservation or omission), shall be rejected.

#### **Method Statement**

Instructions on preparation and submission of Method Statement

Each Bidder shall set out details of the Method Statement for the Works to demonstrate how it will meet the Employer's objective and requirements.

As a minimum, the Method Statement shall address the following:

- (a) Method Statement for all major activities like e.g. line survey, erection, installation, stringing of towers, tower earthing system, measures for crossing roads and/or other lines, etc. The Bidder shall describe how the works are intended to be performed, safety measures to be taken, equipment to be used etc. presented in the manner and details indicated Part II, Employer's Requirements.
- (b) Details of the arrangements and methods which the Bidder proposes to implement for the construction of the Works, in sufficient detail to demonstrate their adequacy to achieve the requirements of the Contract including completion within the Time for Completion stated in the Particular Conditions of Contract.
- (c) Outline of the arrangements of the Bidder to manage coordination of Site access.
- (d) Comments on the geotechnical and subsurface aspects of the Works including materials, material sources and any constraints.
- (e) Comments on any offshore or waterfront aspects of the Works [as may be appropriate].
- (f) Comments on logistics and traffic management.
- (g) Outline of the arrangements and organization of the Bidder to ensure compliance with the Works Requirements.
- (h) Outline of the arrangements of the Bidder to carry out testing upon completion as specified in the Works Requirements. Describing how the Works Requirements are intended to be performed, safety measures to be taken, equipment to be used, etc.
- (i) Organization of multiple work teams must be described in detail.
- (j) Interface Coordination with the other Contractor for substation and transmission line.

#### **Mobilization Schedule**

Instructions on preparation and submission of Mobilization Schedule

The Bidder shall submit a Mobilization Schedule. The Mobilization schedule shall be in form of start-up schedule. It shall contain a 4 (four) week schedule which covers the initial requirements such as (but not limited to) starting the actual work i.e. kick -off meetings/ workshops, mobilizing of personnel & equipment, specify necessary works/permits for site access, establishment of offices, buildings, and other necessary general facilities for the contractor's operations at the site; premiums paid for performance and payment bonds including insurance agreements as applicable; and other items specified in Part II, Employer's Requirements, agree way forward with Employer/Engineer, obtain Employer/ Engineers objectives, obtain required doc., initial mobilization activities, data collection, site inspection, meet project parties etc.

### **Tentative Time Schedule**

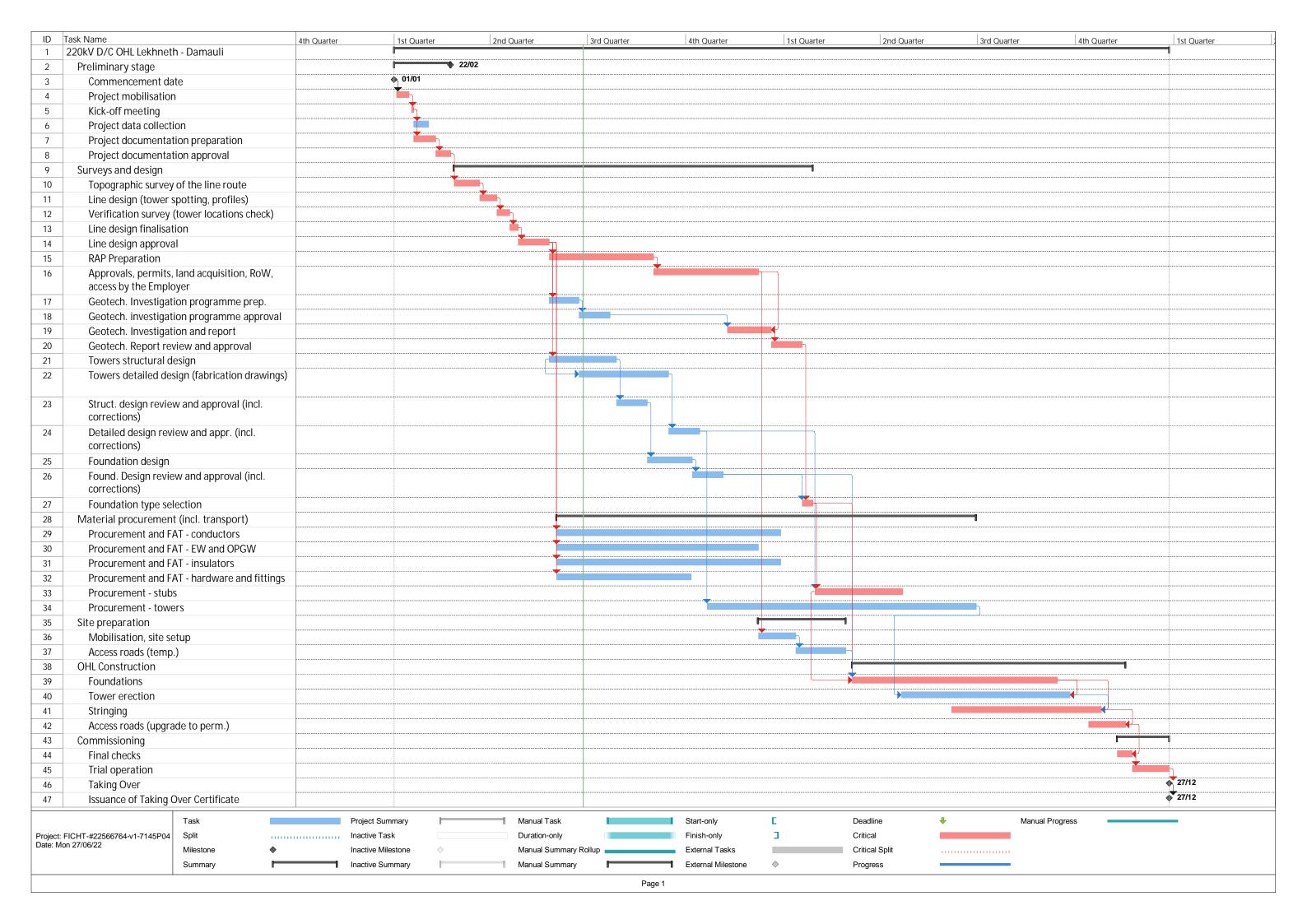
#### Instructions on preparation and submission of Time Schedule

Each Bidder shall set out a detailed Program and Schedule (hereinafter mentioned as "Time Schedule") for construction of the Works to be performed, including estimated starting and finishing dates for individual components and identification of major milestones and critical path. The proposed Time Schedule shall be developed according to Works Requirements and shall address the following:

- (a) Details of the proposed schedule for obtaining permits that may be necessary in order to commence the Works, including the preparation of required studies, supporting information, and applications.
- (b) Details of the proposed timeline for carrying out the Works within the Time for Completion, in the form of a bar chart showing notably the critical path.
- (c) Details of the proposed timeline for the testing, commissioning and handing over of the completed Works.
- (d) The Time Schedule shall clearly state the completion date for this project, time for review, approval and consent required from parties. Potential parallel work on various parts of the Works should be clearly visible. The foreseen sequence of works, e.g. considering time for approval of design by authorities, weather conditions etc.
- (e) The Tentative Time schedule, which can be found attached, has been compiled to assist Bidders in assessing the programming requirements and phasing of the project implementation works.
- (f) Coordination with the Package B Contractor shall be duly considered in Time Schedule to limit outages times as much as possible
- (g)
- (h) For preparation of their tentative time schedule to be submitted with the Bid, the Bidders shall consider typical weather conditions in Nepal for site works planning; in particular the monsoon season (June September)..

## **Tentative Time Schedule**

For preparation of their tentative time schedule to be submitted with the Bid, the Bidders shall consider typical weather conditions in Nepal for site works planning; in particular the monsoon season (June - September).



## **Plant & Conformity of Facilities**

Instructions on preparation and submission of documentary evidence established with ITB 16 that the Plant and Installation Services offered by the Bidder conform to the Bidding Document.

Reference is made to Part II - Employer's Requirements, where the intended scope of supply and services, along with the applicable general and particular technical requirements are laid down.

In this part of the Bid, the Bidder shall submit all necessary forms and documentary evidence (as requested in the present Bidding Document) in order to demonstrate that the facilities offered by the Bidder conform to the Employer's Requirements.

This part shall include, as a minimum:

A detailed description of the essential technical and performance characteristics of the facilities to be provided (including all components and equipment), including filled-in Technical Data Sheets (Part II, Section VII, Technical Data Sheets), reference lists, end - user certificates, drawings, up-to date brochures and catalogues, type test reports (as per the reequipments of Part II, Section VII- Employer's Requirements) etc.

A summary of the required documentary evidence that expected to be submitted for each equipment/component can be found attached in form of the table Conformity of Facilities, here below.

Especially with regard to the filled - in Technical Data Sheets, these shall also be submitted in electronic form (editable format), along with the electronic copy(-ies) of the Bid.

- <u>Preliminary Drawings</u> of the facilities to be provided, including: Preliminary GA (General Arrangement) drawing and clearance diagram for each tower type, preliminary tower weights, preliminary foundation drawings, insulator unit and insulator set drawings, tower earthing system, conductor and OPGW cross section drawings and Sag & Tension calculations, type test certificates for all main items of supply (conductor, OPGW, insulator unit and set,...), tower testing facility technical details etc. presented in the manner and details indicated in Annexes.
- Commentary on the Employer's Requirements (including technical requirements/ specifications) and adequate evidence demonstrating the substantial responsiveness of the facilities to those specifications. Bidders shall note that the standards for skill, materials and equipment designated by the Employer in the Bidding Document are intended to be descriptive (establishing standards of quality and performance) only and not restrictive. A Bidder may substitute alternative standards (similar or better), brand names and/or catalogue numbers in his tender, provided that he demonstrates to the Employer's satisfaction- that the substitutions are substantial, equivalent or superior to those designated in the technical specifications.

#### **Conformity of the Facilities Requirements**

Item	Description of Component	Filled-in Tech- nical Data Sheets	Reference lists**	End-user certifi- cates***	Quality certificates/ type test certificates****	Technical Drawings	Brochures/ catalogues	Additional require- ments
1	Steel lattice tower	х	х	-	х	<b>x</b> <sup>1</sup>	-	-
2	Tower testing station	-	Х	x	-	-	Х	-
3	Tower foundation	х	-	-	-	Х	ı	-
4	Tower earthing	Х	-	-	х	Х	х	-
5	Conductor / OPGW / earthwire	x	X	x	X	X <sup>2</sup>	X	-
6	Insulator unit	Х	Х	х	х	Х	Х	-
7	Fittings	х	Х	х	х	Х	Х	-
8	Insulator set	х	Х	-	х	Х	Х	-
9	Civil Works	-	<b>X</b> <sup>3</sup>	х	-	-	Х	-
10	Erection and Installation Works	-	<b>X</b> <sup>3</sup>	х	-	-	х	-
11	Equipment & Machinery	-	-	-	-	-	Х	-
12	Testing and Commissioning Works	-	$\chi^3$	x <sup>3</sup>	-	-	Х	-

#### Legend:

- x: The Bidder shall submit the required documentary evidence.
- -: The Bidder is not required to submit any documentation in this regard.
- \*\*: The reference lists shall refer to at least 10 years.
- \*\*\*: The Bidder shall submit certificates from at least **three (3)** end-users having purchased equipment similar to the offered one, manufactured throughout the last 5 years.
- \*\*\*\*. The type test certificates shall not be older than 10 years and shall be issued from an independent institute.
- 1: Tower technical drawings shall include, for each tower type, outline drawing, BE and LE combinations and clearance diagram

- 2: Conductor/OPGW/earthwire technical drawings shall include: detailed cross-section drawing, grease details (where applicable), drawing of proposed drum, sag & tension calculations
- 3: In addition to reference lists, end-user/taking-over certificates for at least three (3) contracts (for similar works which the subcontractor is supposed to carry out) within the last ten (10) years shall be provided.

# **Contractor's Equipment (Form)**

[The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key Contractor's equipment listed in Section III, Evaluation and Qualification Criteria. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.]

Item of equipmo	ent				
Equipment nformation	Name of manufacturer	Model and power rating			
	Capacity	Year of manufacture			
Current status	Current location	<u>I</u>			
	Details of current commitments				
Source	Source Indicate source of the equipment  ☐ Owned ☐ Rented ☐ Leased ☐ Specially manufactured				
	g information for equipment owned by the Bid	der.			
Owner	Name of owner				
	Address of owner				
	Telephone	Contact name and title			
	Fax Telex				
Agreements	Details of rental / lease / manufacture agreements specific to the project				

# **Personnel (Forms)**

comprises Personnel Schedule, Forms PER-1 and PER-2. The Forms themselves, along with the relevant instructions follow.

#### **Personnel Schedule**

[Personnel schedule for the whole duration of the Works, for engineering, construction, erection, commissioning and taking over activities, indicating: position and name of the personnel (in case of joint venture/consortium, the relevant member shall be explicitly mentioned); total number of expatriates and local personnel; time of minimum stay on site for local and expatriate personnel, including the proposed key personnel; qualification and experience of expatriates and local personnel; This schedule needs to be properly coordinated with the Time Schedule and Work Team Schedule;]

No.	Position	Name	Name of Employer	Min. stay on site	Experience	CV provided
				[months]	[years]	[yes/no]

Note: CVs for all listed personnel must be provided.

# Form PER-1 Proposed Personnel

[Bidders shall provide the names of suitably qualified personnel to meet the specified requirements stated in Section III. The data on their experience shall be supplied using the Form below for each candidate.]

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

<sup>\*</sup>As listed in Section III.

# Form PER-2 Resume of Proposed Personnel

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

Summarize professional experience over the last 20 years, in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

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

# Proposed Suppliers/Manufacturers and Subcontractors for Major Items of Plant and Installation Services

[comprises the List of proposed Suppliers/Manufacturers and Subcontractors for the Major Items of Plant and Installation Services. For each position, the name(s) of the proposed subcontractor or supplier/manufacturer shall be provided by the Bidder; terms like "or equivalent" or "or similar" will be considered as nil and void. Bidders are free to propose, up to three (3) subcontractors or suppliers/manufacturers for each item. The reference list and the authorization form for each proposed subcontractor or supplier/manufacturer shall be submitted as attachments to the present forms. Further main equipment might be added by the Bidder. Further lines are to be added in case of more than one supplier for any particular equipment.]

Item	Item of Supply/Services	Name of Supplier/Manufacturer or Subcontractor	Country of origin of equipment or Subcontractor	Authorization form added [Yes/No]	Documentation, drawings etc. as per Conformity of Facilities Requirements added [Yes/No]
1.	Transmission Line Equipment				
1.1					
1.2					
1.3					
1.4					
1.5					
1.6					
1.7					
1.8					
1.9					
1.10					
2.	Civil Works				
3.	Erection, Stringing and installation works				

# Supplier's / Manufacturer's or Subcontractor's Authorization (Form)

[This Form / letter shall be issued on the original letterhead of the Supplier/Manufacturer or Subcontractor and shall be signed by a person competent and having the power of attorney to bind the Supplier/Manufacturer or Subcontractor. It shall be included by the Bidder in its Bid as specified in the Instructions to Bidders.]

#### To: NEPAL ELECTRICITY AUTHORITY (NEA)

Lekhnath Damauli 220 kV Transmission Line Project Lekhnath Substation, Badahare, Pokhara Metropolitan City ward no. 27, *Kaski Gondaki Province, Nepal.* 

Attention: Mr. Jagadish Sharma Poudel

Email: Id220kvtlp@gmail.com

WHEREAS [name of the Supplier/Manufacturer or Subcontractor] who is official [supplier/manufacturer or subcontractor] of [name and/or description of the goods or services] having [manufacturing facilities or premises] at [address of factory or premises] do hereby authorize [name and address of Bidder] to submit a bid, and subsequently negotiate and sign a Contract with you for the above [goods manufactured by us or services provided by us] for the quantities, specifications and delivery schedule called for by the requirements associated with the Invitation for Bids.

We duly authorize the Bidder to act on our behalf in fulfilling all warranty obligations with respect to the above listed [goods or services] offered for resale by the Bidder in relation to this Invitation for Bids.

Name
Signed
Duly authorized to sign the authorization for and on behalf of
Date:

## **List of Deviations (Form)**

[List of Deviations Form shall be submitted even in case of no deviations. In that case, the Bidder shall include the remark "no deviations" and shall sign/stamp the form.

The Bidder shall not indicate the cost impact associated with any deviation (to this purpose, the separate **Form: List of Deviation and Cost impact, thus,** part of the Financial Proposal, shall be submitted by the Bidder.

The Bidder is meeting the requirements laid down in Part II - Employer's Requirements and Part III - Conditions of Contract (CC) and Contract Forms in all respects, other than those listed below.

Non-material deviations mentioned in the text or drawings forming part of the Bid, but not contained in this list, <u>will be considered as nil and void</u> and the respective parts of the Works will be treated as fully in line with the requirements of this Bidding Document.

The Employer reserves the right to accept or reject any deviation.

No	Reference (please state	Deviation from Specifications
	Vol., Part, Sec. etc.)	

# **FINANCIAL BID**

#### Preamble / Schedules of Rates and Prices

#### General

- 1. The price schedules are divided into separate schedules as follows:
  - Schedule No. I Plant and Mandatory Spare Parts Supplied from Abroad
  - Schedule No. II Plant and Mandatory Spare Parts Supplied from Within the Employer's Country
  - Schedule No. III Design Services
  - Schedule No. IV Installation and Other Services
  - Schedule No. V: ESHS Requirements
  - Schedule No. VI. Grand Summary
  - Schedule No. VII Recommended Spare Parts
  - Schedule No. VIII: Optional Items Supplied from Abroad
- 2. The Schedules may not give a full description of the Plant and Equipment to be supplied and the services to be performed under each item. However, Bidders shall be deemed to have read the Employer's Requirements and other sections of the bidding documents and to have reviewed the respective drawings so as to ascertain the full scope of the requirements included in each item, prior to filling in the rates and prices. The entered rates and prices shall be deemed to regard the full scope, as aforesaid, including overheads and profit.
- 3. If Bidders are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with the Instructions to Bidders in the bidding documents prior to submitting their bids.

#### **Pricing**

4. Prices shall be entered in indelible ink, and any alterations necessary due to errors etc. shall be initialed by the Bidder. As specified in the Bid Data Sheet, prices shall be fixed and firm for the duration of the Contract.

The project will be executed on a lump-sum basis. All prices quoted are fixed and firm prices. Any quantities which may be set out in a Schedule or in the description of the scope of supply are estimated quantities and are not to be taken as the actual and correct quantities of the Works which the Contractor is required to execute on a lump-sum basis. Namely, all items are deemed to be included to provide a fully functional system and to complete the purpose of the Works. Exceptions, which will be paid "at actual" (based on unit rates as per Price Schedules) based on the quoted unit prices, are as follows:

- tower foundations
- towers and leg extensions
- leg extensions
- phase conductor
- OPGW / earthwire
- insulator strings and fittings
- tower earthing
- permanent access roads.

Price Adjustment shall apply for the Towers and Conductors only in accordance with the stipulations mentioned below.

5. Bid prices shall be quoted in the manner indicated specified in the Instructions to Bidders (ITB) in the Bidding Documents.

For each item, Bidders shall complete each appropriate column in the respective Schedules, giving the price breakdown as indicated in the Schedules.

Prices given in the Schedules No. I to IV for each item shall be for the scope covered by that item as detailed in the Employer's Requirement.

ESHS Requirements (Schedule No. V): Before preparing and adapting the requirements or specifications listed hereafter the explanations to Section VII, Employer's Requirements - Environmental and Social Management and Monitoring Plan, shall be duly considered. Interim payment certificates shall include the portion of each ESMMP cost amounting to the percentage of the actual progress achieved in executing the ESMMP measures in compliance with the CESMP and approved by the Engineer.

6. Where there are discrepancies between the total of the amounts in the column for the price breakdown and the amount in the column for the total price, the former shall prevail, and the latter will be corrected accordingly.

Where there are discrepancies between the total of the amounts of Schedules I to V and the amount given in Schedule No. V (Grand Summary), the former shall prevail, and the latter will be corrected accordingly.

Where there are discrepancies between amounts stated in figures and amounts stated in words, the amounts stated in words shall prevail.

- 7. Payments will be made to the Contractor in the currency or currencies indicated under each respective item.
- 8. Items left blank will be assumed to have been included in prices for other items. The total for each schedule and the total of the Grand Summary shall be assumed to be the total price for executing the Facilities and sections thereof in complete accordance with the Contract, whether or not each individual item has been priced.
- 9. When requested by the Employer for the purposes of making payments or part payments, calculating variations or evaluating claims, or for such other purposes as the Employer may reasonably require, the Contractor shall provide the Employer with a breakdown of any composite or lump sum items included in the Schedules.

#### The handling of the Price Schedules is described in the Instruction to Bidders (ITB).

The price of recommended spare parts and tools and optional items shall include the price of goods delivered to Employer's stores. The cost of these items will be noted during evaluation but **not be part of the evaluated price**. They will serve as basis of any order of additional spares or tools, should the Employer decide to make use of this list or part thereof.

Therefore, the Contractor shall provide a list of priced spare parts, special tools, consumables etc., recommended (based on operational experience and maintenance requirements of the equipment) for the first 5 years of operation, following Performance Certificate. The prices shall be fixed up to the purchase order by the Employer, prior to issuance of the Performance Certificate.

The Employer reserves the right to order additionally or to reduce the supply of material and services up to an amount of plus/minus 10% /-15% of the goods and services of the total value of the contract price prior to contract signature, without the variation of the Unit Price items quoted in Price Schedule.

#### **Price Adjustments for Tower material and Conductors**

Only Applicable to Price Schedule I item 1.1 for Towers and 1.2.1 for Conductors

Prices payable to the Contractor, in accordance with the Contract, shall be subject to adjustment during performance of the Contract to reflect changes in the cost of material components, in accordance with the following formulae:

#### **For Tower**

$$Pn = P_0 \times (a + b\frac{Fe_0}{Fe_1}) - P_0$$

in which:

 $P_n$  = adjustment amount payable to the Contractor

 $P_{o}$  = Contract price (base price)

a = percentage of fixed element in Contract price (a = 36%)

b = percentage of construction steel component in Contract price (b =64%)

 $M_{FE0}$ ,  $M_{FE1}$  = International Construction Steel Index on the base date and the date for adjustment, respectively

#### **For Conductor**

$$Pn = P_0 \times (a + b \frac{Fe_0}{Fe_1} + c \frac{Al_0}{Al_1}) - P_0$$

in which:

 $P_n$  = adjustment amount payable to the Contractor

 $P_{o}$  = Contract price (base price)

a = percentage of fixed element in Contract price (a = 30%)

b = percentage of construction steel component in Contract price (b = 18%)

c = percentage of Aluminum component in Contract price (c = 52%)

 $M_{FE0}$ ,  $M_{FE1}$  = International Construction Steel Index on the base date and the date for adjustment, respectively

 $M_{ALO}$ ,  $M_{AL1}$  = International Aluminum Price Index on the base date and the date for adjustment, respectively

#### **Conditions Applicable to Price Adjustment**

The Bidder shall indicate the base date indices in its bid.

Item	Source of Indices Used	Base Date Indices
Tower Material and Conductor:		
Construction steel:	London Metal Exchange CFR India (official rate)	

Item	Source of Indices Used	Base Date Indices
Aluminum:	London Metal Exchange cash (official rate)	

The base date shall be the date twenty-one (21) days prior to the Bid closing date.

The date of adjustment shall be the mid-point (365 days) of the project.

The following conditions shall apply:

- (a) No price increase will be allowed beyond the original delivery date unless covered by an extension of time awarded by the Employer under the terms of the Contract. No price increase will be allowed for periods of delay for which the Contractor is responsible. The Employer will, however, be entitled to any price decrease occurring during such periods of delay.
- (b) If the currency in which the Contract price, P<sub>0</sub>, is expressed is different from the currency of the country of origin of the labor and/or materials indices, a correction factor will be applied to avoid incorrect adjustments of the Contract price. The correction factor shall correspond to the ratio of exchange rates between the two currencies on the base date and the date for adjustment as defined above.
- (c) No price adjustment shall be payable on the portion of the Contract price paid to the Contractor as an advance payment.

# Schedule I

Plant and Mandatory Spare Parts Supplied from Abroad

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
1	LEKHNATH - DAMAULI 220	KV DOUBLE	CIRCUIT	LINE		
1.1	SELF-SUPPORTING STEEL LATTICE TOWERS COMPLETE WITH ALL BOLTS, NUTS, PLATES, LEG EXTENSIONS, SAFETY DEVICES, ANTI-CLIMBING DEVICES, STEP-BOLTS, ACCESSORIES AND EXTENSIONS					
1.1.1	Normal Suspension Tower Type DA					
1.1.1.1	Basic tower -6 m		pcs	0		
1.1.1.2	Basic tower -3 m		pcs	1		
1.1.1.3	Basic tower ±0 m		pcs	22		
1.1.1.4	Basic tower +3 m		pcs	9		
1.1.1.5	Basic tower +6 m		pcs	4		
1.1.1.6	Basic tower +9 m		pcs	2		
1.1.1.7	Basic tower +12 m		pcs	0		
1.1.1.8	Leg reduction -3.0m		pcs	16		
1.1.1.9	Leg reduction -1.5m		pcs	22		
1.1.1.10	Leg extensions ±0 m		pcs	62		
1.1.1.11	Leg extensions +1.5 m		pcs	22		
1.1.1.12	Leg extensions +3.0 m		pcs	18		
1.1.1.13	Leg extensions +4.5 m		pcs	8		
1.1.1.14	Leg extensions +6.0 m		pcs	4		
1.1.2	Light Angle (0° - 15°) Tension Tower Type DB					
1.1.2.1	Basic tower -6 m		pcs	0		
1.1.2.2	Basic tower -3 m		pcs	5		
1.1.2.3	Basic tower ±0 m		pcs	30		
1.1.2.4	Basic tower +3 m		pcs	7		
1.1.2.5	Basic tower +6 m		pcs	6		
1.1.2.6	Basic tower +9 m		pcs	1		
1.1.2.7	Leg reduction -3.0 m		pcs	10		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
1.1.2.8	Leg reduction -1.5 m		pcs	24		
1.1.2.9	Leg extensions ±0 m		pcs	84		
1.1.2.10	Leg extensions +1.5 m		pcs	36		
1.1.2.11	Leg extensions +3.0 m		pcs	22		
1.1.2.12	Leg extensions +4.5 m		pcs	16		
1.1.2.13	Leg extensions +6.0 m		pcs	4		
1.1.3	Medium Angle (15° - 30°) Tension Tower Type DC					
1.1.3.1	Basic tower -6 m		pcs	0		
1.1.3.2	Basic tower -3 m		pcs	1		
1.1.3.3	Basic tower ±0 m		pcs	17		
1.1.3.4	Basic tower +3 m		pcs	5		
1.1.3.5	Basic tower +6 m		pcs	5		
1.1.3.6	Basic tower +9 m		pcs	3		
1.1.3.6	Basic tower +12 m		pcs	1		
1.1.3.7	Leg reduction -3.0 m		pcs	10		
1.1.3.8	Leg reduction -1.5 m		pcs	24		
1.1.3.9	Leg extensions ±0 m		pcs	54		
1.1.3.10	Leg extensions +1.5 m		pcs	16		
1.1.3.11	Leg extensions +3.0 m		pcs	12		
1.1.3.12	Leg extensions +4.5 m		pcs	8		
1.1.3.13	Leg extensions +6.0 m		pcs	4		
1.1.4	Heavy Angle (30°-60°) Tower Type DD					
1.1.4.1	Basic tower -6 m		pcs	0		
1.1.4.2	Basic tower -3 m		pcs	2		
1.1.4.3	Basic tower ±0 m		pcs	10		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
1.1.4.4	Basic tower +3 m		pcs	6		
1.1.4.5	Basic tower +6 m		pcs	1		
1.1.4.6	Basic tower +9 m		pcs	0		
1.1.4.7	Leg reduction -3.0 m		pcs	4		
1.1.4.8	Leg reduction -1.5 m		pcs	8		
1.1.4.9	Leg extensions ±0 m		pcs	24		
1.1.4.10	Leg extensions +1.5 m		pcs	14		
1.1.4.11	Leg extensions +3.0 m		pcs	18		
1.1.4.12	Leg extensions +4.5 m		pcs	4		
1.1.4.13	Leg extensions +6.0 m		pcs	4		
1.1.5	Dead End (0°-45° Line/0°-45° Gantry) Tower Type DE					
1.1.5.1	Basic tower -3 m		pcs	0		
1.1.5.2	Basic tower ±0 m		pcs	4		
1.1.5.3	Basic tower +3 m		pcs	0		
1.1.5.4	Basic tower +6 m		pcs	0		
1.1.5.5	Leg reduction -3.0 m		pcs	0		
1.1.5.6	Leg reduction -1.5 m		pcs	2		
1.1.5.7	Leg extensions ±0 m		pcs	12		
1.1.5.8	Leg extensions +1.5 m		pcs	2		
1.1.5.9	Leg extensions +3.0 m		pcs	0		
1.1.5.10	Leg extensions +4.5 m		pcs	0		
1.1.5.10	Leg extensions +6.0 m		pcs	0		
1.1.6	Undercrossing Gantry Tower Type UCG					
1.1.6.1	Basic tower ±0 m		pcs	1		
1.1.6.2	Leg extensions ±0 m		pcs	2		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
1.1.7	Multi Circuit Angle (0°-50°) Tension Tower Type 6T					
1.1.7.1	Basic tower -6 m		pcs	0		
1.1.7.2	Basic tower -3 m		pcs	0		
1.1.7.3	Basic tower ±0 m		pcs	6		
1.1.7.4	Basic tower +3 m		pcs	2		
1.1.7.5	Basic tower +6 m		pcs	1		
1.1.7.6	Basic tower +9 m		pcs	0		
1.1.7.7	Leg reduction -3.0 m		pcs	0		
1.1.7.8	Leg reduction -1.5 m		pcs	4		
1.1.7.9	Leg extensions ±0 m		pcs	16		
1.1.7.10	Leg extensions +1.5 m		pcs	8		
1.1.7.11	Leg extensions +3.0 m		pcs	8		
1.1.7.12	Leg extensions +4.5 m		pcs	4		
1.1.7.12	Leg extensions +6.0 m		pcs	0		
	QUIDTOTAL OTES! TOWERS					
	SUBTOTAL STEEL TOWERS					
1,2	PHASE CONDUCTORS, EARTHWIRE AND OPGW CABLE COMPLETE WITH REPAIR SLEEVES AND JOINTS					
1.2.1	ACSR Moose phase conductor (double circuit, 3 phases, two sub- conductors per phase, 2x3x2) including extra length for sags, joints, jumpers, downleads and downdroppers		route km	45		
1.2.2	Earthwire 93-A20SA type including extra length for sags, earthing connections, etc.		route km	45		
1.2.3	48 fibres OPGW (sag matching conductor) including extra length for sags, earthing connections, downleads to joint box, coils, etc.		route km	45		
1.2.4	Joint Boxes along the line (2 OPGW entries) + coiling devices		JB+set	17		
1.2.5	Joint Boxes on terminal Substation gantries (1 OPGW entry + 1 OPUG entry) + coiling devices		JB+set	3		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
1,3	SPACER DAMPERS					
1.3.1	Spacer Dampers for Phase conductor 2 x ACSR Moose (including vibration damping study)		lot	1		
1,4	VIBRATION DAMPERS					
1.4.1	Stockbridge Dampers for Phase conductor Twin ACSR Moose (including vibration damping study)		lot	1		
1.4.2	Stockbridge Dampers for Earthwire 93-A20SA (including vibration damping study)		lot	1		
1.4.3	Stockbridge Dampers for OPGW (equivalent to 93-A20SA) (including vibration damping study)		lot	1		
1,5	RIGID SPACERS FOR PHASE CONDUCTOR JUMPER LOOPS					
1.5.1	Rigid Spacers for Twin ACSR Moose		lot	1		
1,6	AVIAN PROTECTION & AIRCRAFT WARNING SYSTEM					
1.6.1	Bird repellent system (spiked steel strips)		per tower	44		
1.6.2	Bird flight diverters		route km	18,5		
1.6.3	Aircraft marker balls (wire mounted)		route km	5		
1.6.4	Aircraft warning lights (wire mounted)		route km	5		
1.6.5	Aircraft warning lights (tower mounted)		per tower	20		
1.6.6	Tower painting		pcs	20		
	SUBTOTAL PHASE CONDUCTORS, EARTHWIRE, OPGW , SPACERS, DAMPERS, AVIAN PROTECTION & AIRCRAFT WARNING SYSTEM					
1,7	INSULATOR STRINGS (HARDWARE AND INSULATORS), WITH COMPOSITE INSULATORS AND ASSOCIATED SUSPENSION AND TENSION CLAMPS FOR PHASE CONDUCTOR					
1.7.1	Single Suspension "I" string for 2 x ACSR Moose		set	160		
1.7.2	Double suspension "I" string for 2 x ACSR Moose		set	68		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	<b>Unit Price</b>	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
1.7.3	Double tension string for 2 x ACSR Moose		set	1332		
1.7.4	Jumpers insulator string for 2 x ACSR Moose		set	180		
1.7.5	Low Duty Upright String for 2 x ACSR Moose		set	18		
1.7.6	Low Duty Inverted String for 2 x ACSR Moose		set	12		
1,8	EARTHWIRE SETS FOR 93-A20SA COMPLETE WITH ALL ACCESSORIES					
1.8.1	Suspension Set		set	38		
1.8.2	Tension Set		set	105		
1,9	OPGW SETS FOR OPGW (EQUIVALENT TO 93-A20SA) COMPLETE WITH ALL ACCESSORIES INCLUDING ARMOUR RODS AND EARTH CONNECTIONS					
1.9.1	Suspension Set		set	38		
1.9.2	Tension By-Pass (non-joint) set		set	104		
1.9.3	Tension through set, double side, with connection to Joint Box set (including surplus OPGW length and all fittings and accessories needed to guide the OPGW to the joint box)		set	9		
1.9.4	Tension set, single side, with connection to Joint Box set (including surplus OPGW length and all fittings and accessories needed to guide the OPGW to the joint box)		set	4		
	SUBTOTAL INSULATOR STRINGS, EARTHWIRE SETS, OPGW SETS					
1.10	TOWER EARTHING					
1.10.1	Basic earthing system		per tower	152		
1.10.2	Additional earthing system		per tower	54		
1.10.3	Extension of additional earthing system		per tower	36		
	SUBTOTAL TOWER EARTHING					

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
1,11	FOUNDATIONS INCLUDING STUBS, CLEATS, SETTING AND EXTENDED CHIMNEY WHERE REQUIRED					
1.11.1	Foundations for Tower Type DA					
1.11.1.1	Soil type 1		per tower	1		
1.11.1.2	Soil type 2 (dry)		per tower	3		
1.11.1.3	Soil type 2 (in presence of sub-soil water)		per tower	1		
1.11.1.4	Soil type 3 (dry)		per tower	11		
1.11.1.5	Soil type 3 (in presence of sub-soil water)		per tower	10		
1.11.1.6	Soil type 3 (wet black cotton)		per tower	4		
1.11.1.7	Soil type 4		per tower	4		
1.11.1.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	4		
1.11.2	Foundations for Tower Type DB					
1.11.2.1	Soil type 1		per tower	2		
1.11.2.2	Soil type 2 (dry)		per tower	4		
1.11.2.3	Soil type 2 (in presence of sub-soil water)		per tower	2		
1.11.2.4	Soil type 3 (dry)		per tower	15		
1.11.2.5	Soil type 3 (in presence of sub-soil water)		per tower	14		
1.11.2.6	Soil type 3 (wet black cotton)		per tower	4		
1.11.2.7	Soil type 4		per tower	3		
1.11.2.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	5		
1.11.3	Foundations for Tower Type DC					
1.11.3.1	Soil type 1		per tower	0		
1.11.3.2	Soil type 2 (dry)		per tower	1		
1.11.3.3	Soil type 2 (in presence of sub-soil water)		per tower	1		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
1.11.3.4	Soil type 3 (dry)		per tower	12		
1.11.3.5	Soil type 3 (in presence of sub-soil water)		per tower	8		
1.11.3.6	Soil type 3 (wet black cotton)		per tower	3		
1.11.3.7	Soil type 4		per tower	2		
1.11.3.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	4		
1.11.4	Foundations for Tower Type DD					
1.11.4.1	Soil type 1		per tower	0		
1.11.4.2	Soil type 2 (dry)		per tower	2		
1.11.4.3	Soil type 2 (in presence of sub-soil water)		per tower	1		
1.11.4.4	Soil type 3 (dry)		per tower	6		
1.11.4.5	Soil type 3 (in presence of sub-soil water)		per tower	4		
1.11.4.6	Soil type 3 (wet black cotton)		per tower	1		
1.11.4.7	Soil type 4		per tower	1		
1.11.4.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	3		
1.11.5	Foundations for Tower Type DE					
1.11.5.1	Soil type 1		per tower	0		
1.11.5.2	Soil type 2 (dry)		per tower	0		
1.11.5.3	Soil type 2 (in presence of sub-soil water)		per tower	0		
1.11.5.4	Soil type 3 (dry)		per tower	0		
1.11.5.5	Soil type 3 (in presence of sub-soil water)		per tower	1		
1.11.5.6	Soil type 3 (wet black cotton)		per tower	0		
1.11.5.7	Soil type 4		per tower	0		
1.11.5.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	3		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
1.11.6	Foundations for Tower Type UCG					
1.11.6.1	Soil type 1		per tower	0		
1.11.6.2	Soil type 2 (dry)		per tower	0		
1.11.6.3	Soil type 2 (in presence of sub-soil water)		per tower	0		
1.11.6.4	Soil type 3 (dry)		per tower	1		
1.11.6.5	Soil type 3 (in presence of sub-soil water)		per tower	0		
1.11.6.6	Soil type 3 (wet black cotton)		per tower	0		
1.11.6.7	Soil type 4		per tower	0		
1.11.6.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	0		
1.11.7	Foundations for Multi Circuit Angle Tension Tower Type 6T					
1.11.7.1	Soil type 1		per tower	0		
1.11.7.2	Soil type 2 (dry)		per tower	1		
1.11.7.3	Soil type 2 (in presence of sub-soil water)		per tower	1		
1.11.7.4	Soil type 3 (dry)		per tower	4		
1.11.7.5	Soil type 3 (in presence of sub-soil water)		per tower	2		
1.11.7.6	Soil type 3 (wet black cotton)		per tower	0		
1.11.7.7	Soil type 4		per tower	0		
1.11.7.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	0		
	SUBTOTAL FOUNDATIONS					
	TOTAL LEKHNATH - DAMAULI 220 KV DOUBLE CIRCUIT LINE					

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
		•			(USD)	(USD)
	INTERCONNECTION OF TANALILL BUADATRUB 200 KV	NOUBLE CIE	CUITLIN	1	2	3=1x2
2	INTERCONNECTION OF TANAHU - BHARATPUR 220 KV I		COII LIN	E IO NEW L	DAIVIAULI 3/3	(LOOP IN -
2.1	SELF-SUPPORTING STEEL LATTICE TOWERS COMPLETE WITH ALL BOLTS, NUTS, PLATES, LEG EXTENSIONS, SAFETY DEVICES, ANTI-CLIMBING DEVICES, STEP-BOLTS, ACCESSORIES AND EXTENSIONS					
2.1.1	Multi Circuit Angle (0°-50°) Tension Tower Type 6T					
2.1.1.1	Basic tower -6 m		pcs	0		
2.1.1.2	Basic tower -3 m		pcs	0		
2.1.1.3	Basic tower ±0 m		pcs	3		
2.1.1.4	Basic tower +3 m		pcs	1		
2.1.1.5	Basic tower +6 m		pcs	0		
2.1.1.6	Basic tower +9 m		pcs	0		
2.1.1.7	Leg reduction -3.0 m		pcs	0		
2.1.1.8	Leg reduction -1.5 m		pcs	2		
2.1.1.9	Leg extensions ±0 m		pcs	8		
2.1.1.10	Leg extensions +1.5 m		pcs	4		
2.1.1.11	Leg extensions +3.0 m		pcs	2		
2.1.1.12	Leg extensions +4.5 m		pcs	0		
2.1.1.13	Leg extensions +6.0 m		pcs	0		
	QUIDTOTAL OTTEL TOWERS					
	SUBTOTAL STEEL TOWERS					
2,2	PHASE CONDUCTORS EARTHWIRE AND OPGW CABLE COMPLETE WITH REPAIR SLEEVES AND JOINTS					
2.2.1	ACSR Bison phase conductor (four circuits, 3 phases, two subconductors per phase, 4x3x2) including extra length for sags, joints, jumpers, downleads and downdroppers		route km	3		
2.2.2	48 fibres OPGW (equivalent to 93-A20SA) including extra length for sags, earthing connections, downleads to joint box, coils, etc.		route km	3		
2.2.3	Earthwire 93-A20SA type including extra length for sags, earthing connections, etc.		route km	1,0		
2.2.4	Joint Boxes along the line (3 OPGW entries) + coiling devices		JB+set	6		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
2.2.5	Joint Boxes on terminal Substation gantries (1 OPGW entry + 1 OPUG entry) + coiling devices		JB+set	1		
2,3	SPACER DAMPERS					
2.3.1	Spacer Dampers for Phase conductor 2 x ACSR Bison (including vibration damping study)		lot	1		
2,4	VIBRATION DAMPERS					
2.4.1	Stockbridge Dampers for Phase conductor Twin ACSR Bison (including vibration damping study)		lot	1		
2.4.2	Stockbridge Dampers for OPGW (equivalent to 93-A20SA) (including vibration damping study)		lot	1		
2.4.3	Stockbridge Dampers for Earthwire 93-A20SA (including vibration damping study)		lot	1		
2,5	RIGID SPACERS FOR PHASE CONDUCTOR JUMPER LOOPS					
2.5.1	Rigid Spacers for Twin ACSR Bison		lot	1		
	SUBTOTAL PHASE CONDUCTORS, OPGW , SPACERS AND DAMPERS					
2,6	INSULATOR STRINGS (HARDWARE AND INSULATORS), WITH COMPOSITE INSULATORS AND ASSOCIATED TENSION CLAMPS FOR PHASE CONDUCTOR					
2.6.1	Double tension string for 2 x ACSR Bison		set	324		
2.6.2	Jumpers insulator string for 2 x ACSR Bison		set	66		
2.6.3	Low Duty Upright String for 2 x ACSR Bison		set	12		
2.6.4	Low Duty Inverted String for 2 x ACSR Bison		set	12		
2,7	OPGW SETS FOR OPGW (EQUIVALENT TO 93-A20SA) COMPLETE WITH ALL ACCESSORIES INCLUDING ARMOUR RODS AND EARTH CONNECTIONS					
2.7.1	Tension By-Pass (non-joint) set		set	13		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
2.7.2	Tension through set, double side, with connection to Joint Box set (including surplus OPGW length and all fittings and accessories needed to guide the OPGW to the joint box)		set	1		
2.7.3	Tension set, single side, with connection to Joint Box set (including surplus OPGW length and all fittings and accessories needed to guide the OPGW to the joint box)		set	4		
2,8	EARTHWIRE SETS FOR 93-A20SA COMPLETE WITH ALL ACCESSORIES					
2.8.1	Tension Set		set	6		
	SUBTOTAL INSULATOR STRINGS, EARTHWIRE SETS, OPGW SETS					
2,9	TOWER EARTHING					
2.9.1	Basic earthing system		per tower	4		
2.9.2	Additional earthing system		per tower	2		
2.9.3	Extension of additional earthing system		per tower	0		
	SUBTOTAL TOWER EARTHING					
	FOUNDATIONS INCLUDING STUBS, CLEATS, SETTING AND					
2.10	EXTENDED CHIMNEY WHERE REQUIRED					
2.10.1	Foundations for Multi Circuit Angle Tension Tower Type 6T					
2.10.1.1	Soil type 1		per tower	0		
2.10.1.2	Soil type 2 (dry)		per tower	0		
2.10.1.3	Soil type 2 (in presence of sub-soil water)		per tower	0		
2.10.1.4	Soil type 3 (dry)		per tower	3		
2.10.1.5	Soil type 3 (in presence of sub-soil water)		per tower	1		
2.10.1.6	Soil type 3 (wet black cotton)		per tower	0		
2.10.1.7	Soil type 4		per tower	0		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
	Piled foundations (wet black cotton >3.5m deep or frustum angle			1	2	3=1x2
2.10.1.8	ened foundations (wet black cotton >5.5m deep of frustum angle <10°)		per tower	0		
	SUBTOTAL FOUNDATIONS					
	TOTAL INTERCONNECTION OF TANAHU - BHARATPUR 220 KV DOUBLE CIRCUIT LINE TO NEW DAMAULI S/S (LOOP IN - LOOP OUT)					
3	INTERCONNECTION OF OLD DAMAULI - BHARATPUR 132 K		CIRCUIT L	INE TO NE	W DAMAULI S	/S (LOOP IN
3.1.1	Dead End (0°-45° Line/0°-45° Gantry) Tower Type DE					
3.1.1.1	Basic tower -3 m		pcs	0		
3.1.1.2	Basic tower ±0 m		pcs	1		
3.1.1.3	Basic tower +3 m		pcs	2		
3.1.1.4	Basic tower +6 m		pcs	0		
3.1.1.5	Leg reduction -3.0 m		pcs	0		
3.1.1.6	Leg reduction -1.5 m		pcs	0		
3.1.1.7	Leg extensions ±0 m		pcs	8		
3.1.1.8	Leg extensions +1.5 m		pcs	4		
3.1.1.9	Leg extensions +3.0 m		pcs	0		
3.1.1.10	Leg extensions +4.5 m		pcs	0		
3.1.1.10	Leg extensions +6.0 m		pcs	0		
	SUBTOTAL STEEL TOWERS					
3,2	PHASE CONDUCTORS, OPGW AND EARTHWIRE COMPLETE WITH REPAIR SLEEVES AND JOINTS					
3.2.1	ACSR Wolf phase conductor (two circuits, 3 phases, one conductor per phase, 2x3x1) including extra length for sags, joints, jumpers, downleads and downdroppers		route km	0,45		
3.2.2	ACSR Wolf phase conductor (one circuit, 3 phases, one conductor per phase, 1x3x1) including extra length for sags, joints, jumpers, downleads and downdroppers		route km	0,55		
3.2.3	96 fibres OPGW (equivalent to 66-A20SA) including extra length for sags, earthing connections, downleads to joint box, coils, etc.		route km	0,45		
3.2.4	Earthwire 66-A20SA type including extra length for sags, earthing connections, etc.		route km	1		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code (Country of origin)	Unit	Quantity	Unit Price CIP	Total Price CIP
				1	2	3=1x2
2.2.5	Joint Boxes along the line (3 OPGW entries) + coiling devices		JB+set	1		
3.2.6	Joint Boxes on terminal Substation gantries (1 OPGW entry + 1 OPUG entry ) + coiling devices		JB+set	1		
3,3	VIBRATION DAMPERS					
3.3.1	Stockbridge Dampers for Phase conductor ACSR Wolf (including vibration damping study)		lot	1		
3.3.2	Stockbridge Dampers for Earthwire 66-A20SA (including vibration damping study)		lot	1		
3.3.2	Stockbridge Dampers for 96 fibres OPGW (equivalent to 66-A20SA) (including vibration damping study)		lot	1		
	SUBTOTAL PHASE CONDUCTORS, OPGW AND EARTHWIRE AND DAMPERS					
3,4	INSULATOR STRINGS (HARDWARE AND INSULATORS), WITH COMPOSITE INSULATORS AND ASSOCIATED TENSION CLAMPS FOR PHASE CONDUCTOR					
3.4.1	Double tension string for ACSR Wolf		set	30		
3.4.2	Jumpers insulator string for ACSR Wolf		set	9		
3.4.3	Low Duty Upright String for ACSR Wolf		set	6		
3.4.4	Low Duty Inverted String for ACSR Wolf		set	6		
3,5	EARTHWIRE SETS FOR 93-A20SA COMPLETE WITH ALL ACCESSORIES					
3.5.1	Tension Set		set	10		
3,6	OPGW SETS FOR OPGW (EQUIVALENT TO 93- A20SA)COMPLETE WITH ALL ACCESSORIES INCLUDING ARMOUR RODS AND EARTH CONNECTIONS					
3.6.1	Tension By-Pass (non-joint) set		set	2		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
3.6.2	Tension set, single side, with connection to Joint Box set (including surplus OPGW length and all fittings and accessories needed to guide the OPGW to the joint box)		set	2		
	SUBTOTAL INSULATOR STRINGS, EARTHWIRE SETS, OPGW SETS					
3,7	TOWER EARTHING					
3.7.1	Basic earthing system		per tower	3		
3.7.2	Additional earthing system		per tower	2		
3.7.3	Extension of additional earthing system		per tower	1		
	SUBTOTAL TOWER EARTHING					
	FOUNDATIONS INCLUDING STUBS, CLEATS, SETTING AND					
3,8	EXTENDED CHIMNEY WHERE REQUIRED					
3.8.1	Foundations for Tower Type DE					
3.8.1.1	Soil type 1		per tower	0		
3.8.1.2	Soil type 2 (dry)		per tower	0		
3.8.1.3	Soil type 2 (in presence of sub-soil water)		per tower	0		
3.8.1.4	Soil type 3 (dry)		per tower	2		
3.8.1.5	Soil type 3 (in presence of sub-soil water)		per tower	0		
3.8.1.6	Soil type 3 (wet black cotton)		per tower	0		
3.8.1.7	Soil type 4		per tower	0		
3.8.1.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	1		
	SUBTOTAL FOUNDATIONS					
	TOTAL INTERCONNECTION OF OLD DAMAULI - BHARATPUR 132 KV SINGLE CIRCUIT LINE TO NEW DAMAULI S/S (LOOP IN - LOOP OUT)					

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price		
		(Country of origin)			CIP	CIP		
					(USD)	(USD)		
				1	2	3=1x2		
	TOTAL OHL							
4	MANDATORY SPARE PARTS							
4,1	TOWERS							
4.1.1	Complete Standard Height Suspension tower type DA including all body extensions, leg extensions, stubs, cleats, step bolts, plates, safety device, bolts, nuts and accessories supplied adequately protected for long time storage		pcs	2				
4.1.2	Complete Standard Height Tension Tower Type DB (0°-15°) including all body extensions, leg extensions, stubs, cleats, step bolts, plates, safety device, bolts, nuts and accessories supplied adequately protected for long time storage		pcs	2				
4.1.3	Complete Standard Height Tension Tower Type DC (15°- 30°) including all body extensions, leg extensions, stubs, cleats, step bolts, plates, safety device, bolts, nuts and accessories supplied adequately protected for long time storage		pcs	1				
4.1.4	Complete Standard Height Tension Tower Type DD (15°- 30°) including all body extensions, leg extensions, stubs, cleats, step bolts, plates, safety device, bolts, nuts and accessories supplied adequately protected for long time storage		pcs	1				
4.1.5	Complete Standard Height Tension Tower Type 6T including all body extensions, leg extensions, stubs, cleats, step bolts, plates, safety device, bolts, nuts and accessories supplied adequately protected for long time storage		pcs	1				
4,2	PHASE CONDUCTOR, EARTHWIRE AND OPGW							
4.2.1	ACSR MOOSE conductor (double circuit, 3 phases, two sub- conductors per phase, 2x3x2) supplied on steel drums and protection adequate for long time storage		route km	3				
4.2.2	ACSR bison conductor (double circuit, 3 phases, two sub-conductors per phase, 2x3x2) supplied on steel drums and protection adequate for long time storage		route km	1				
4.2.3	Earthwire 93-A20SA type supplied on steel drums and protection adequate for long time storage		route km	3				
4.2.4	48 fibres OPGW (93-A20SA equivalent) on steel drums and protection adequate for long time storage		route km	5				
4.2.5	Joint Boxes (2 entries OPGW)		pcs	4				
4.2.6	Joint Boxes (1 entry OPGW + 1 entry OPUG)		pcs	1				

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

#### Schedule No. I: Plant and Mandatory Spare Parts Supplied from Abroad

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
4,3	COMPOSITE INSULATORS					
4.3.1	120kN Composite Insulator		pcs	50		
4,4	INSULATOR SET, WITH ASSOCIATED SUSPENSION AND TENSION CLAMPS FOR PHASE CONDUCTOR					
4.4.1	Single Suspension "I" string for 2 x ACSR Moose		pcs	12		
4.4.2	Double suspension "I" string for 2 x ACSR Moose		pcs	3		
4.4.3	Double tension string for 2 x ACSR Moose		pcs	24		
4.4.4	Double tension string for 2 x ACSR Bison		pcs	16		
4,5	EARTHWIRE SETS COMPLETE WITH ALL ACCESSORIES					
4.5.1	93-A20SA Suspension Set		set	10		
4.5.2	93-A20SA Tension Set		set	8		
4,6	OPGW SETS COMPLETE WITH ALL ACCESSORIES INCLUDING ARMOUR RODS AND EARTH CONNECTIONS					
4.6.1	Suspension Set		set	10		
4.6.2	Tension Non-joint set		set	8		
4.6.3	Tension Joint set		set	6		
4,7	DAMPERS					
4.7.1	Stockbridge Dampers for Phase conductor ACSR Moose		pcs	30		
4.7.2	Stockbridge Dampers for Phase conductor ACSR Bison		pcs	20		
4.7.3	Stockbridge Dampers for Earthwire 93-A20SA		pcs	10		
4.7.4	Stockbridge Dampers for OPGW (similar to 93-A20SA)		pcs	10		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

#### Schedule No. I: Plant and Mandatory Spare Parts Supplied from Abroad

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD)
				1	2	3=1x2
4,8	REPAIR SLEEVE					
4.8.1	For ACSR Moose		pcs	18		
4.8.2	For ACSR Bison		pcs	12		
4.8.3	For Earthwire 93-A20SA		pcs	8		
4,9	MIDSPAN JOINTS					
4.9.1	For ACSR Moose		pcs	18		
4.9.2	For ACSR Bison		pcs	4		
4.9.3	For Earthwire 93-A20SA		pcs	9		
4,10	SPACER DAMPERS					
4.10.1	For 2 x ACSR Moose conductor		pcs	50		
4.10.2	For 2 x ACSR Bison conductor		pcs	20		
4,11	AVIAN PROTECTION					
4.11.1	Bird repellent system (spiked steel strips)		per tower	6		
4.11.2	Bird flight diverters		route km	2		
	SUBTOTAL MANDATORY SPARE PARTS					
		TOOLO				
5		TOOLS				
5,1	Resistivity tester with ground resistance test facility		pcs	2		
5,2	Fusion splicer OPGW		pcs	2		
5,3	Compression dies for ACSR Moose conductor		set	2		
5,4	Compression dies for ACSR Bison conductor		set	2		
5,5	Compression dies for ACSR Wolf conductor		set	2		
5,6	Electronic magnetic galvanising thickness gauge		pcs	2		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

#### Schedule No. I: Plant and Mandatory Spare Parts Supplied from Abroad

ltem	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(USD)	(USD) 3=1x2
				1	2	
	SUBTOTAL TOOLS					
6	OTHER NECESSARY MA	TERIAL AND E	QUIPMEI	NT		
6,1	Other necessary material and equipment (list to be provided separately by the Bidder)		lot	1		
	SUBTOTAL OTHER NECESSARY MATERIAL AND EQUIPMENT					
	TOTAL OHL					

•	• ,

Name of Bidder:

Signature of Bidder:

## Schedule II

Plant and Mandatory Spare Parts Supplied from Within the Employer's Country

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
		g,			(NPR)	(NPR)
				1	2	3=1x2
1	LEKHNATH - DAMAULI 220	KV DOUBLE	CIRCUIT	LINE		
1.1	SELF-SUPPORTING STEEL LATTICE TOWERS COMPLETE WITH ALL BOLTS, NUTS, PLATES, LEG EXTENSIONS, SAFETY DEVICES, ANTI-CLIMBING DEVICES, STEP-BOLTS, ACCESSORIES AND EXTENSIONS					
1.1.1	Normal Suspension Tower Type DA					
1.1.1.1	Basic tower -6 m		pcs	0		
1.1.1.2	Basic tower -3 m		pcs	1		
1.1.1.3	Basic tower ±0 m		pcs	22		
1.1.1.4	Basic tower +3 m		pcs	9		
1.1.1.5	Basic tower +6 m		pcs	4		
1.1.1.6	Basic tower +9 m		pcs	2		
1.1.1.7	Basic tower +12 m		pcs	0		
1.1.1.8	Leg reduction -3.0m		pcs	16		
1.1.1.9	Leg reduction -1.5m		pcs	22		
1.1.1.10	Leg extensions ±0 m		pcs	62		
1.1.1.11	Leg extensions +1.5 m		pcs	22		
1.1.1.12	Leg extensions +3.0 m		pcs	18		
1.1.1.13	Leg extensions +4.5 m		pcs	8		
1.1.1.14	Leg extensions +6.0 m		pcs	4		
1.1.2	Light Angle (0° - 15°) Tension Tower Type DB					
1.1.2.1	Basic tower -6 m		pcs	0		
1.1.2.2	Basic tower -3 m		pcs	5		
1.1.2.3	Basic tower ±0 m		pcs	30		
1.1.2.4	Basic tower +3 m		pcs	7		
1.1.2.5	Basic tower +6 m		pcs	6		
1.1.2.6	Basic tower +9 m		pcs	1		
1.1.2.7	Leg reduction -3.0 m		pcs	10		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(NPR)	(NPR)
				1	2	3=1x2
1.1.2.8	Leg reduction -1.5 m		pcs	24		
1.1.2.9	Leg extensions ±0 m		pcs	84		
1.1.2.10	Leg extensions +1.5 m		pcs	36		
1.1.2.11	Leg extensions +3.0 m		pcs	22		
1.1.2.12	Leg extensions +4.5 m		pcs	16		
1.1.2.13	Leg extensions +6.0 m		pcs	4		
1.1.3	Medium Angle (15° - 30°) Tension Tower Type DC					
1.1.3.1	Basic tower -6 m		pcs	0		
1.1.3.2	Basic tower -3 m		pcs	1		
1.1.3.3	Basic tower ±0 m		pcs	17		
1.1.3.4	Basic tower +3 m			5		
1.1.3.5	Basic tower +6 m		pcs	5		
1.1.3.6	Basic tower +9 m		pcs	3		
			pcs			
1.1.3.6	Basic tower +12 m		pcs	1		
1.1.3.7	Leg reduction -3.0 m		pcs	10		
1.1.3.8	Leg reduction -1.5 m		pcs	24		
1.1.3.9	Leg extensions ±0 m		pcs	54		
1.1.3.10			pcs	16		
1.1.3.11	Leg extensions +3.0 m		pcs	12		
1.1.3.12	Leg extensions +4.5 m		pcs	8		
1.1.3.13	Leg extensions +6.0 m		pcs	4		
1.1.4	Heavy Angle (30°-60°) Tower Type DD					
1.1.4.1	Basic tower -6 m		pcs	0		
1.1.4.2	Basic tower -3 m		pcs	2		
1.1.4.3	Basic tower ±0 m		pcs	10		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
		Origini			(NPR)	(NPR)
				1	2	3=1x2
1.1.4.4	Basic tower +3 m		pcs	6		
1.1.4.5	Basic tower +6 m		pcs	1		
1.1.4.6	Basic tower +9 m		pcs	0		
1.1.4.7	Leg reduction -3.0 m		pcs	4		
1.1.4.8	Leg reduction -1.5 m		pcs	8		
1.1.4.9	Leg extensions ±0 m		pcs	24		
1.1.4.10	Leg extensions +1.5 m		pcs	14		
1.1.4.11	Leg extensions +3.0 m		pcs	18		
1.1.4.12	Leg extensions +4.5 m		pcs	4		
1.1.4.13	Leg extensions +6.0 m		pcs	4		
1.1.5	Dead End (0°-45° Line/0°-45° Gantry) Tower Type DE					
1.1.5.1	Basic tower -3 m		pcs	0		
1.1.5.2	Basic tower ±0 m		pcs	4		
1.1.5.3	Basic tower +3 m		pcs	0		
1.1.5.4	Basic tower +6 m		pcs	0		
1.1.5.5	Leg reduction -3.0 m		pcs	0		
1.1.5.6	Leg reduction -1.5 m		pcs	2		
1.1.5.7	Leg extensions ±0 m		pcs	12		
1.1.5.8	Leg extensions +1.5 m		pcs	2		
1.1.5.9	Leg extensions +3.0 m		pcs	0		
1.1.5.10	Leg extensions +4.5 m		pcs	0		
1.1.5.10	Leg extensions +6.0 m		pcs	0		
1.1.6	Undercrossing Gantry Tower Type UCG					
1.1.6.1	Basic tower ±0 m		pcs	1		
1.1.6.2	Leg extensions ±0 m		pcs	2		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
		J			(NPR)	(NPR)
				1	2	3=1x2
1.1.7	Multi Circuit Angle (0°-50°) Tension Tower Type 6T					
1.1.7.1	Basic tower -6 m		pcs	0		
1.1.7.2	Basic tower -3 m		pcs	0		
1.1.7.3	Basic tower ±0 m		pcs	6		
1.1.7.4	Basic tower +3 m		pcs	2		
1.1.7.5	Basic tower +6 m		pcs	1		
1.1.7.6	Basic tower +9 m		pcs	0		
1.1.7.7	Leg reduction -3.0 m		pcs	0		
1.1.7.8	Leg reduction -1.5 m		pcs	4		
1.1.7.9	Leg extensions ±0 m		pcs	16		
1.1.7.10	Leg extensions +1.5 m		pcs	8		
1.1.7.11	Leg extensions +3.0 m		pcs	8		
1.1.7.12	Leg extensions +4.5 m		pcs	4		
1.1.7.12	Leg extensions +6.0 m		pcs	0		
	SUBTOTAL STEEL TOWERS					
1,2	PHASE CONDUCTORS, EARTHWIRE AND OPGW CABLE COMPLETE WITH REPAIR SLEEVES AND JOINTS					
1.2.1	ACSR Moose phase conductor (double circuit, 3 phases, two sub- conductors per phase, 2x3x2) including extra length for sags, joints, jumpers, downleads and downdroppers		route km	45		
1.2.2	Earthwire 93-A20SA type including extra length for sags, earthing connections, etc.		route km	45		
1.2.3	48 fibres OPGW (sag matching conductor) including extra length for sags, earthing connections, downleads to joint box, coils, etc.		route km	45		
1.2.4	Joint Boxes along the line (2 OPGW entries) + coiling devices		JB+set	17		
1.2.5	Joint Boxes on terminal Substation gantries (1 OPGW entry + 1 OPUG entry) + coiling devices		JB+set	3		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(NPR)	(NPR)
				1	2	3=1x2
1,3	SPACER DAMPERS					
1.3.1	Spacer Dampers for Phase conductor 2 x ACSR Moose (including vibration damping study)		lot	1		
1,4	VIBRATION DAMPERS					
1.4.1	Stockbridge Dampers for Phase conductor Twin ACSR Moose (including vibration damping study)		lot	1		
1.4.2	Stockbridge Dampers for Earthwire 93-A20SA (including vibration damping study)		lot	1		
1.4.3	Stockbridge Dampers for OPGW (equivalent to 93-A20SA) (including vibration damping study)		lot	1		
1,5	RIGID SPACERS FOR PHASE CONDUCTOR JUMPER LOOPS					
1.5.1	Rigid Spacers for Twin ACSR Moose		lot	1		
1,6	AVIAN PROTECTION & AIRCRAFT WARNING SYSTEM					
1.6.1	Bird repellent system (spiked steel strips)		per tower	44		
1.6.2	Bird flight diverters		route km	18,5		
1.6.3	Aircraft marker balls (wire mounted)		route km	5		
16,4	Aircraft warning lights (wire mounted)		route km	5		
16,5	Aircraft warning lights (tower mounted)		per tower	20		
16,6	Tower painting		pcs	20		
	SUBTOTAL PHASE CONDUCTORS, EARTHWIRE, OPGW , SPACERS, DAMPERS, AVIAN PROTECTION & AIRCRAFT WARNING SYSTEM					
	NOUL ATOR OTRINGO (HARRING TO A TORS)					
1,7	INSULATOR STRINGS (HARDWARE AND INSULATORS), WITH COMPOSITE INSULATORS AND ASSOCIATED SUSPENSION AND TENSION CLAMPS FOR PHASE CONDUCTOR					
1.7.1	Single Suspension "I" string for 2 x ACSR Moose		set	160		
1.7.2	Double suspension "I" string for 2 x ACSR Moose		set	68		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(NPR)	(NPR)
				1	2	3=1x2
1.7.3	Double tension string for 2 x ACSR Moose		set	1332		
1.7.4	Jumpers insulator string for 2 x ACSR Moose		set	180		
1.7.5	Low Duty Upright String for 2 x ACSR Moose		set	18		
1.7.6	Low Duty Inverted String for 2 x ACSR Moose		set	12		
1,8	EARTHWIRE SETS FOR 93-A20SA COMPLETE WITH ALL ACCESSORIES					
1.8.1	Suspension Set		set	38		
1.8.2	Tension Set		set	105		
1,9	OPGW SETS FOR OPGW (EQUIVALENT TO 93-A20SA) COMPLETE WITH ALL ACCESSORIES INCLUDING ARMOUR RODS AND EARTH CONNECTIONS					
1.9.1	Suspension Set		set	38		
1.9.2	Tension By-Pass (non-joint) set		set	104		
1.9.3	Tension through set, double side, with connection to Joint Box set (including surplus OPGW length and all fittings and accessories needed to guide the OPGW to the joint box)		set	9		
1.9.4	Tension set, single side, with connection to Joint Box set (including surplus OPGW length and all fittings and accessories needed to guide the OPGW to the joint box)		set	4		
	SUBTOTAL INSULATOR STRINGS, EARTHWIRE SETS, OPGW					
	SETS					
1.10	TOWER EARTHING					
1.10.1	Basic earthing system		per tower	152		
1.10.2	Additional earthing system		per tower	54		
1.10.3	Extension of additional earthing system		per tower	36		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
		<b>J</b>			(NPR)	(NPR)
				1	2	3=1x2
1,11	FOUNDATIONS INCLUDING STUBS, CLEATS, SETTING AND EXTENDED CHIMNEY WHERE REQUIRED					
1.11.1	Foundations for Tower Type DA					
1.11.1.1	Soil type 1		per tower	1		
1.11.1.2	Soil type 2 (dry)		per tower	3		
1.11.1.3	Soil type 2 (in presence of sub-soil water)		per tower	1		
1.11.1.4	Soil type 3 (dry)		per tower	11		
1.11.1.5	Soil type 3 (in presence of sub-soil water)		per tower	10		
1.11.1.6	Soil type 3 (wet black cotton)		per tower	4		
1.11.1.7	Soil type 4		per tower	4		
1.11.1.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	4		
1.11.2	Foundations for Tower Type DB					
1.11.2.1	Soil type 1		per tower	2		
1.11.2.2	Soil type 2 (dry)		per tower	4		
1.11.2.3	Soil type 2 (in presence of sub-soil water)		per tower	2		
1.11.2.4	Soil type 3 (dry)		per tower	15		
1.11.2.5	Soil type 3 (in presence of sub-soil water)		per tower	14		
1.11.2.6	Soil type 3 (wet black cotton)		per tower	4		
1.11.2.7	Soil type 4		per tower	3		
1.11.2.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	5		
1.11.3	Foundations for Tower Type DC					
1.11.3.1	Soil type 1		per tower	0		
1.11.3.2	Soil type 2 (dry)		per tower	1		
1.11.3.3	Soil type 2 (in presence of sub-soil water)		per tower	1		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(NPR)	(NPR)
				1	2	3=1x2
1.11.3.4	Soil type 3 (dry)		per tower	12		
1.11.3.5	Soil type 3 (in presence of sub-soil water)		per tower	8		
1.11.3.6	Soil type 3 (wet black cotton)		per tower	3		
1.11.3.7	Soil type 4		per tower	2		
1.11.3.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	4		
1.11.4	Foundations for Tower Type DD					
1.11.4.1	Soil type 1		per tower	0		
1.11.4.2	Soil type 2 (dry)		per tower	2		
1.11.4.3	Soil type 2 (in presence of sub-soil water)		per tower	1		
1.11.4.4	Soil type 3 (dry)		per tower	6		
1.11.4.5	Soil type 3 (in presence of sub-soil water)		per tower	4		
1.11.4.6	Soil type 3 (wet black cotton)		per tower	1		
1.11.4.7	Soil type 4		per tower	1		
1.11.4.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	3		
1.11.5	Foundations for Tower Type DE					
1.11.5.1	Soil type 1		per tower	0		
1.11.5.2	Soil type 2 (dry)		per tower	0		
1.11.5.3	Soil type 2 (in presence of sub-soil water)		per tower	0		
1.11.5.4	Soil type 3 (dry)		per tower	0		
1.11.5.5	Soil type 3 (in presence of sub-soil water)		per tower	1		
1.11.5.6	Soil type 3 (wet black cotton)		per tower	0		
1.11.5.7	Soil type 4		per tower	0		
1.11.5.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	3		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(NPR)	(NPR)
				1	2	3=1x2
1.11.6	Foundations for Tower Type UCG					
1.11.6.1	Soil type 1		per tower	0		
1.11.6.2	Soil type 2 (dry)		per tower	0		
1.11.6.3	Soil type 2 (in presence of sub-soil water)		per tower	0		
1.11.6.4	Soil type 3 (dry)		per tower	1		
1.11.6.5	Soil type 3 (in presence of sub-soil water)		per tower	0		
1.11.6.6	Soil type 3 (wet black cotton)		per tower	0		
1.11.6.7	Soil type 4		per tower	0		
1.11.6.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	0		
1.11.7	Foundations for Multi Circuit Angle Tension Tower Type 6T					
1.11.7.1	Soil type 1		per tower	0		
1.11.7.2	Soil type 2 (dry)		per tower	1		
1.11.7.3	Soil type 2 (in presence of sub-soil water)		per tower	1		
1.11.7.4	Soil type 3 (dry)		per tower	4		
1.11.7.5	Soil type 3 (in presence of sub-soil water)		per tower	2		
1.11.7.6	Soil type 3 (wet black cotton)		per tower	0		
1.11.7.7	Soil type 4		per tower	0		
1.11.7.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	0		
	SUBTOTAL FOUNDATIONS					
	TOTAL LEKHNATH - DAMAULI 220 KV DOUBLE CIRCUIT LINE					

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
		Origini			(NPR)	(NPR)
				1	2	3=1x2
2	INTERCONNECTION OF TANAHU - BHARATPUR 220 KV I		CUIT LIN	E TO NEW I	DAMAULI S/S	(LOOP IN -
2.1	SELF-SUPPORTING STEEL LATTICE TOWERS COMPLETE WITH ALL BOLTS, NUTS, PLATES, LEG EXTENSIONS, SAFETY DEVICES, ANTI-CLIMBING DEVICES, STEP-BOLTS, ACCESSORIES AND EXTENSIONS					
2.1.1	Multi Circuit Angle (0°-50°) Tension Tower Type 6T					
2.1.1.1	Basic tower -6 m		pcs	0		
2.1.1.2	Basic tower -3 m		pcs	0		
2.1.1.3	Basic tower ±0 m		pcs	3		
2.1.1.4	Basic tower +3 m		pcs	1		
2.1.1.5	Basic tower +6 m		pcs	0		
2.1.1.6	Basic tower +9 m		pcs	0		
2.1.1.7	Leg reduction -3.0 m		pcs	0		
2.1.1.8	Leg reduction -1.5 m		pcs	2		
2.1.1.9	Leg extensions ±0 m		pcs	8		
2.1.1.10	Leg extensions +1.5 m		pcs	4		
2.1.1.11	Leg extensions +3.0 m		pcs	2		
2.1.1.12	Leg extensions +4.5 m		pcs	0		
2.1.1.13	Leg extensions +6.0 m		pcs	0		
	SUBTOTAL STEEL TOWERS					
2,2	PHASE CONDUCTORS EARTHWIRE AND OPGW CABLE COMPLETE WITH REPAIR SLEEVES AND JOINTS					
2.2.1	ACSR Bison phase conductor (four circuits, 3 phases, two subconductors per phase, 4x3x2) including extra length for sags, joints, jumpers, downleads and downdroppers		route km	3		
2.2.2	48 fibres OPGW (equivalent to 93-A20SA) including extra length for sags, earthing connections, downleads to joint box, coils, etc.		route km	3		
2.2.3	Earthwire 93-A20SA type including extra length for sags, earthing connections, etc.		route km	1,0		
2.2.4	Joint Boxes along the line (3 OPGW entries) + coiling devices		JB+set	6		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(NPR)	(NPR)
				1	2	3=1x2
2.2.5	Joint Boxes on terminal Substation gantries (1 OPGW entry + 1 OPUG entry) + coiling devices		JB+set	1		
2,3	SPACER DAMPERS					
2.3.1	Spacer Dampers for Phase conductor 2 x ACSR Bison (including vibration damping study)		lot	1		
2,4	VIBRATION DAMPERS					
2.4.1	Stockbridge Dampers for Phase conductor Twin ACSR Bison (including vibration damping study)		lot	1		
2.4.2	Stockbridge Dampers for OPGW (equivalent to 93-A20SA) (including vibration damping study)		lot	1		
2,4.3	Stockbridge Dampers for Earthwire 93-A20SA (including vibration damping study)		lot	1		
2,5	RIGID SPACERS FOR PHASE CONDUCTOR JUMPER LOOPS					
2.5.1	Rigid Spacers for Twin ACSR Bison		lot	1		
	SUBTOTAL PHASE CONDUCTORS, OPGW , SPACERS AND DAMPERS					
	INSULATOR STRINGS (HARDWARE AND INSULATORS), WITH					
2,6	COMPOSITE INSULATORS AND ASSOCIATED TENSION CLAMPS FOR PHASE CONDUCTOR					
2.6.1	Double tension string for 2 x ACSR Bison		set	324		
2.6.2	Jumpers insulator string for 2 x ACSR Bison		set	66		
2.6.3	Low Duty Upright String for 2 x ACSR Bison		set	12		
2.6.4	Low Duty Inverted String for 2 x ACSR Bison		set	12		

### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(NPR)	(NPR)
	OPGW SETS FOR OPGW (EQUIVALENT TO 93-A20SA)			1	2	3=1x2
2,7	COMPLETE WITH ALL ACCESSORIES INCLUDING ARMOUR RODS AND EARTH CONNECTIONS					
2.7.1	Tension By-Pass (non-joint) set		set	13		
2.7.2	Tension through set, double side, with connection to Joint Box set (including surplus OPGW length and all fittings and accessories needed to guide the OPGW to the joint box)		set	1		
2.7.3	Tension set, single side, with connection to Joint Box set (including surplus OPGW length and all fittings and accessories needed to guide the OPGW to the joint box)		set	4		
2,8	EARTHWIRE SETS FOR 93-A20SA COMPLETE WITH ALL ACCESSORIES					
2.8.1	Tension Set		set	6		
	SUBTOTAL INSULATOR STRINGS, EARTHWIRE SETS, OPGW SETS					
2,9	TOWER EARTHING					
2.9.1	Basic earthing system		per tower	4		
2.9.2	Additional earthing system		per tower	2		
2.9.3	Extension of additional earthing system		per tower	0		
	SUBTOTAL TOWER EARTHING					
2.10	FOUNDATIONS INCLUDING STUBS, CLEATS, SETTING AND EXTENDED CHIMNEY WHERE REQUIRED					
2.10.1	Foundations for Multi Circuit Angle Tension Tower Type 6T					
2.10.1.1	Soil type 1		per tower	0		
2.10.1.2	Soil type 2 (dry)		per tower	0		
2.10.1.3	Soil type 2 (in presence of sub-soil water)		per tower	0		
2.10.1.4	Soil type 3 (dry)		per tower	3		
2.10.1.5	Soil type 3 (in presence of sub-soil water)		per tower	1		
2.10.1.6	Soil type 3 (wet black cotton)		per tower	0		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	<b>Unit Price</b>	Total Price
		(Country of			CIP	CIP
		origin)			(NPR)	(NPR)
				1	2	3=1x2
2.10.1.7	Soil type 4		per tower	0		
2.10.1.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	0		
	SUBTOTAL FOUNDATIONS					
	TOTAL INTERCONNECTION OF TANAHU - BHARATPUR 220 KV DOUBLE CIRCUIT LINE TO NEW DAMAULI S/S (LOOP IN - LOOP OUT)					
3	INTERCONNECTION OF OLD DAMAULI - BHARATPUR 132 P LOOP		CIRCUIT L	INE TO NE	W DAMAULI S	S/S (LOOP IN
3.1.1	Dead End (0°-45° Line/0°-45° Gantry) Tower Type DE					
3.1.1.1	Basic tower -3 m		pcs	0		
3.1.1.2	Basic tower ±0 m		pcs	1		
3.1.1.3	Basic tower +3 m		pcs	2		
3.1.1.4	Basic tower +6 m		pcs	0		
3.1.1.5	Leg reduction -3.0 m		pcs	0		
3.1.1.6	Leg reduction -1.5 m		pcs	0		
3.1.1.7	Leg extensions ±0 m		pcs	8		
3.1.1.8	Leg extensions +1.5 m		pcs	4		
3.1.1.9	Leg extensions +3.0 m		pcs	0		
3.1.1.10	Leg extensions +4.5 m		pcs	0		
3.1.1.10	Leg extensions +6.0 m		pcs	0		
	SUBTOTAL STEEL TOWERS					

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	<b>Unit Price</b>	Total Price
		(Country of origin)			CIP	CIP
					(NPR)	(NPR)
				1	2	3=1x2
3,2	PHASE CONDUCTORS, OPGW AND EARTHWIRE COMPLETE WITH REPAIR SLEEVES AND JOINTS					
3.2.1	ACSR Wolf phase conductor (two circuits, 3 phases, one conductor per phase, 2x3x1) including extra length for sags, joints, jumpers, downleads and downdroppers		route km	0,45		
3.2.2	ACSR Wolf phase conductor (one circuit, 3 phases, one conductor per phase, 1x3x1) including extra length for sags, joints, jumpers, downleads and downdroppers		route km	0,55		
3.2.3	96 fibres OPGW (equivalent to 66-A20SA) including extra length for sags, earthing connections, downleads to joint box, coils, etc.		route km	0,45		
3.2.4	Earthwire 66-A20SA type including extra length for sags, earthing connections, etc.		route km	1		
2.2.5	Joint Boxes along the line (3 OPGW entries) + coiling devices		JB+set	1		
3.2.6	Joint Boxes on terminal Substation gantries (1 OPGW entry + 1 OPUG entry) + coiling devices		JB+set	1		
3,3	VIBRATION DAMPERS					
3.3.1	Stockbridge Dampers for Phase conductor ACSR Wolf (including vibration damping study)		lot	1		
3.3.2	Stockbridge Dampers for Earthwire 66-A20SA (including vibration damping study)		lot	1		
3.3.2	Stockbridge Dampers for 96 fibres OPGW (equivalent to 66-A20SA) (including vibration damping study)		lot	1		
	SUBTOTAL PHASE CONDUCTORS, OPGW AND EARTHWIRE AND DAMPERS					
3,4	INSULATOR STRINGS (HARDWARE AND INSULATORS), WITH COMPOSITE INSULATORS AND ASSOCIATED TENSION CLAMPS FOR PHASE CONDUCTOR					
3.4.1	Double tension string for ACSR Wolf		set	30		
3.4.2	Jumpers insulator string for ACSR Wolf		set	9		
3.4.3	Low Duty Upright String for ACSR Wolf		set	6		
3.4.4	Low Duty Inverted String for ACSR Wolf		set	6		
		1				j

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(NPR)	(NPR)
				1	2	3=1x2
3,5	EARTHWIRE SETS FOR 93-A20SA COMPLETE WITH ALL ACCESSORIES					
3.5.1	Tension Set		set	10		
3,6	OPGW SETS FOR OPGW (EQUIVALENT TO 93- A20SA)COMPLETE WITH ALL ACCESSORIES INCLUDING ARMOUR RODS AND EARTH CONNECTIONS					
3.6.1	Tension By-Pass (non-joint) set		set	2		
3.6.2	Tension set, single side, with connection to Joint Box set (including surplus OPGW length and all fittings and accessories needed to guide the OPGW to the joint box)		set	2		
	SUBTOTAL INSULATOR STRINGS, EARTHWIRE SETS, OPGW SETS					
3,7	TOWER EARTHING					
3.7.1	Basic earthing system		per tower	3		
3.7.2	Additional earthing system		per tower	2		
3.7.3	Extension of additional earthing system		per tower	1		
	SUBTOTAL TOWER EARTHING					
3,8	FOUNDATIONS INCLUDING STUBS, CLEATS, SETTING AND EXTENDED CHIMNEY WHERE REQUIRED					
3.8.1	Foundations for Tower Type DE					
3.8.1.1	Soil type 1		per tower	0		_
3.8.1.2	Soil type 2 (dry)		per tower	0		
3.8.1.3	Soil type 2 (in presence of sub-soil water)		per tower	0		
3.8.1.4	Soil type 3 (dry)		per tower	2		
3.8.1.5	Soil type 3 (in presence of sub-soil water)		per tower	0		
3.8.1.6	Soil type 3 (wet black cotton)		per tower	0		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price				
		(Country of origin)			CIP	CIP				
					(NPR)	(NPR)				
				1	2	3=1x2				
3.8.1.7	Soil type 4		per tower	0						
3.8.1.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)		per tower	1						
	SUBTOTAL FOUNDATIONS									
	TOTAL INTERCONNECTION OF OLD DAMAULI - BHARATPUR 132 KV SINGLE CIRCUIT LINE TO NEW DAMAULI S/S (LOOP IN - LOOP OUT)									
	TOTAL OHL									
4	MANDATORY SPARE PARTS									
4,1	TOWERS									
4.1.1	Complete Standard Height Suspension tower type DA including all body extensions, leg extensions, stubs, cleats, step bolts, plates, safety device, bolts, nuts and accessories supplied adequately protected for long time storage		pcs	2						
4.1.2	Complete Standard Height Tension Tower Type DB (0°- 15°) including all body extensions, leg extensions, stubs, cleats, step bolts, plates, safety device, bolts, nuts and accessories supplied adequately protected for long time storage		pcs	2						
4.1.3	Complete Standard Height Tension Tower Type DC (15°- 30°) including all body extensions, leg extensions, stubs, cleats, step bolts, plates, safety device, bolts, nuts and accessories supplied adequately protected for long time storage		pcs	1						
4.1.4	Complete Standard Height Tension Tower Type DD (15°- 30°) including all body extensions, leg extensions, stubs, cleats, step bolts, plates, safety device, bolts, nuts and accessories supplied adequately protected for long time storage		pcs	1						
4.1.5	Complete Standard Height Tension Tower Type 6T including all body extensions, leg extensions, stubs, cleats, step bolts, plates, safety device, bolts, nuts and accessories supplied adequately protected for long time storage		pcs	1						
4,2	PHASE CONDUCTOR, EARTHWIRE AND OPGW									
4.2.1	ACSR MOOSE conductor (double circuit, 3 phases, two sub- conductors per phase, 2x3x2) supplied on steel drums and protection adequate for long time storage		route km	3						

### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
		<b>.</b>			(NPR)	(NPR)
				1	2	3=1x2
4.2.2	ACSR bison conductor (double circuit, 3 phases, two sub-conductors per phase, 2x3x2) supplied on steel drums and protection adequate for long time storage		route km	1		
4.2.3	Earthwire 93-A20SA type supplied on steel drums and protection adequate for long time storage		route km	3		
4.2.4	48 fibres OPGW (93-A20SA equivalent) on steel drums and protection adequate for long time storage		route km	5		
4.2.5	Joint Boxes (2 entries OPGW)		pcs	4		
4.2.6	Joint Boxes (1 entry OPGW + 1 entry OPUG)		pcs	1		
4,3	COMPOSITE INSULATORS					
4.3.1	120kN Composite Insulator		pcs	50		
4,4	INSULATOR SET, WITH ASSOCIATED SUSPENSION AND TENSION CLAMPS FOR PHASE CONDUCTOR					
4.4.1	Single Suspension "I" string for 2 x ACSR Moose		pcs	12		
4.4.2	Double suspension "I" string for 2 x ACSR Moose		pcs	3		
4.4.3	Double tension string for 2 x ACSR Moose		pcs	24		
4.4.4	Double tension string for 2 x ACSR Bison		pcs	16		
4,5	EARTHWIRE SETS COMPLETE WITH ALL ACCESSORIES					
4.5.1	93-A20SA Suspension Set		set	10		
4.5.2	93-A20SA Tension Set		set	8		
4,6	OPGW SETS COMPLETE WITH ALL ACCESSORIES INCLUDING ARMOUR RODS AND EARTH CONNECTIONS					
4.6.1	Suspension Set		set	10		
4.6.2	Tension Non-joint set		set	8		
4.6.3	Tension Joint set		set	6		
4,7	DAMPERS					
4.7.1	Stockbridge Dampers for Phase conductor ACSR Moose		pcs	30		

#### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	Unit Price	Total Price
		(Country of origin)			CIP	CIP
					(NPR)	(NPR)
				1	2	3=1x2
4.7.2	Stockbridge Dampers for Phase conductor ACSR Bison		pcs	20		
4.7.3	Stockbridge Dampers for Earthwire 93-A20SA		pcs	10		
4.7.4	Stockbridge Dampers for OPGW (similar to 93-A20SA)		pcs	10		
4,8	REPAIR SLEEVE					
4.8.1	For ACSR Moose		pcs	18		
4.8.2	For ACSR Bison		pcs	12		
4.8.3	For Earthwire 93-A20SA		pcs	8		
4,9	MIDSPAN JOINTS					
4.9.1	For ACSR Moose		pcs	18		
4.9.2	For ACSR Bison		pcs	4		
4.9.3	For Earthwire 93-A20SA		pcs	9		
4,10	SPACER DAMPERS					
4.10.1	For 2 x ACSR Moose conductor		pcs	50		
4.10.2	For 2 x ACSR Bison conductor		pcs	20		
4,11	AVIAN PROTECTION					
4.11.1	Bird repellent system (spiked steel strips)		per tower	6		
4.11.2	Bird flight diverters		route km	2		
	SUBTOTAL MANDATORY SPARE PARTS					
F		TOOLS				
5		10013		1		I
5,1	Resistivity tester with ground resistance test facility		pcs	2		

### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Item	Description	Code	Unit	Quantity	<b>Unit Price</b>	Total Price
		(Country of origin)			CIP	CIP
					(NPR)	(NPR)
				1	2	3=1x2
5,3	Compression dies for ACSR Moose conductor		set	2		
5,4	Compression dies for ACSR Bison conductor		set	2		
5,5	Compression dies for ACSR Wolf conductor		set	2		
5,6	Electronic magnetic galvanising thickness gauge		pcs	2		
	SUBTOTAL TOOLS					
6	OTHER NECESSARY MATERIAL AND EQUIPMENT		lot	1		
	TOTAL OHL					

	SUBTOTAL TOOLS				
6	OTHER NECESSARY MATERIAL AND EQUIPMENT		lot	1	
	TOTAL OHL				
	TOTAL (to Schedule No. VI Grand Summary)				
		Name of Bio	dder:		
		Signature o	f Bidder:		
	_				 

Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

#### Schedule No. III: Design Services

Item	Description	Unit	Quantity	Unit Price CIP	Total Price
				(USD)	(USD)
		1	2	3	4=2x3
1.1	LINE DESIGN				
1.1.1	Detailed transmission line design including plan and profiles; conductor, earthwire and OPGW sag-tension calculations, tower spotting and structural verification of the towers, design of earthing, design of towers locations protection and slope stabilization measures (where applicable)	lot	1		
1.1.2	Geotechnical investigations: execution of boreholes	Per tower location	36		
1.1.3	Geotechnical investigations: execution of trial pits	Per tower location	56		
1.1.4	Geotechnical investigations: execution of penetration tests (CPT/SPT)	Per tower location	92		
1.1.5	Geotechnical investigations: execution of penetration tests (DPL)	Per tower location	58		
1.1.6	Geotechnical Investigations (excluding field execution of boreholes, trial pits and penetration tests) including: taking samples, laboratory testing and interpretative reports in accordance with requirements specified in document General Technical Requirements. Also includes the hydrological study described in Sub-Section VII-1	lot	1		
1.1.5	Soil resistivity tests (one per tower)	Per tower location	150		
1.2	SELF-SUPPORTING STEEL LATTICE TOWERS DESIGN COMPLETE WITH ALL BOLTS, NUTS, PLATES, LEG EXTENSIONS, SAFETY DEVICES, ANTI-CLIMBING DEVICES, STEP-BOLTS, ACCESSORIES AND EXTENSIONS				
1.2.1	Normal Suspension Tower Type DA	lot	1		
1.2.2	Light Angle (0° - 15°) Tension Tower Type DB	lot	1		
1.2.3	Medium Angle (15° - 30°) Tension Tower Type DC	lot	1		
1.2.4	Heavy Angle (30°-60°) Tension Tower Type DD	lot	1		
1.2.5	Dead End (0°-45°)/(0°-45°)Tower Type DE	lot	1		
1.2.6	Undercrossing Gantry Tower Type UCG	lot	1		
1.2.6	Six Circuit Angle (0°-50°) Tension Tower Type 6T	lot	1		
1.3	FOUNDATIONS DESIGN INCLUDING STUBS, CLEATS AND SETTING				
1.3.1	Foundations for Tower Type DA (for all soil types)	lot	1		
1.3.2	Foundations for Tower Type DB (for all soil types)	lot	1		
1.3.3	Foundations for Tower Type DC (for all soil types)	lot	1		
1.3.4	Foundations for Tower Type DD (for all soil types)	lot	1		
1.3.5	Foundations for Tower Type DE (for all soil types)	lot	1		

## Schedule III

**Design Services** 

Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

#### Schedule No. III: Design Services

Item	Description	Unit	Quantity	Unit Price	Total Price	
				CIP	CIP	
				(USD)	(USD)	
		1	2	3	4=2x3	
1.3.6	Foundations for Tower Type UCG (for all soil types)	lot	1			
1.3.7	Foundations for Tower Type 6T (for all soil types)	lot	1			
1,4	DESIGN OF EARTHING SYSTEM	Lot	1			
	TOTAL DESIGN					
	TOTAL (6. 0.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.					
	TOTAL (to Schedule No. VI Grand Summary)					
				Name of Bidder:		
				Signature of Bidder:		

# Schedule IV

Installation and Other Services

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
		1	2	3	4=2x3
1	INSTALLATION OF LEKHNATH - DAMA	ULI 220 KV [	OUBLE CIRC	CUIT LINE	
1.1	PRELIMINARY WORKS				
1.1.1	Mobilization and Site installation Office including all necessary equipment and maintenance during whole construction period	lump sum	1		
1.1.2	Construction, maintenance and reinstatement of new access roads, including erosion protection measures and all other works as per Clauses 8.3.1 to 8.3.10 of Sub-Section VII-4	lump sum	1		
1.1.3	Upgrade of temporary access tracks to permanent as per Clause 8.3.11 of Sub-Section VII-4	route km	1		
1.1.4	Fully furnished office for Employer, including running costs	lump sum	1		
1.1.5	Housing facilities for Employer / Engineer use including operation and maintenance during Contract period	lump sum	1		
1.1.6	Survey Works including: angle points identification, line profile survey, towers pegging on site, survey of hill-side extensions, towers protection, towers diagonal profiling	route km	45		
	SUBTOTAL PRELIMINARY WORKS				
1.2	INSTALLATION OF FOUNDATIONS				
	Including: stripping of top soil for re-implementation after backfilling, excavation, placing of blind concrete, stubs setting, earthing system installation, preparing reinforcement steel and concreting (including extended chimneys and surface drainage channel where required), backfilling and compaction, material removal, cleaning and re-instatement of site				
1.2.1	Foundations for Tower Type DA				
1.2.1.1	Soil type 1	per tower	1		
1.2.1.2	Soil type 2 (dry)	per tower	3		
1.2.1.3	Soil type 2 (in presence of sub-soil water)	per tower	1		
1.2.1.4	Soil type 3 (dry)	per tower	11		
1.2.1.5	Soil type 3 (in presence of sub-soil water)	per tower	10		
1.2.1.6	Soil type 3 (wet black cotton)	per tower	4		
1.2.1.7	Soil type 4	per tower	4		

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
	Dilad foundations (wet block cetters 2.5% does as frusture	1	2	3	4=2x3
1.2.1.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)	per tower	4		
1.2.2	Foundations for Tower Type DB				
1.2.2.1	Soil type 1	per tower	2		
1.2.2.2	Soil type 2 (dry)	per tower	4		
1.2.2.3	Soil type 2 (in presence of sub-soil water)	per tower	2		
1.2.2.4	Soil type 3 (dry)	per tower	15		
1.2.2.5	Soil type 3 (in presence of sub-soil water)	per tower	14		
1.2.2.6	Soil type 3 (wet black cotton)	per tower	4		
1.2.2.7	Soil type 4	per tower	3		
1.2.2.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)	per tower	5		
1.2.3	Foundations for Tower Type DC				
1.2.3.1	Soil type 1	per tower	0		
1.2.3.2	Soil type 2 (dry)	per tower	1		
1.2.3.3	Soil type 2 (in presence of sub-soil water)	per tower	1		
1.2.3.4	Soil type 3 (dry)	per tower	12		
1.2.3.5	Soil type 3 (in presence of sub-soil water)	per tower	8		
1.2.3.6	Soil type 3 (wet black cotton)	per tower	3		
1.2.3.7	Soil type 4	per tower	2		
1.2.3.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)	per tower	4		
1.2.4	Foundations for Tower Type DD				
1.2.4.1	Soil type 1	per tower	0		
1.2.4.2	Soil type 2 (dry)	per tower	2		
1.2.4.3	Soil type 2 (in presence of sub-soil water)	per tower	1		
1.2.4.4	Soil type 3 (dry)	per tower	6		

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
		1	2	3	4=2x3
1.2.4.5	Soil type 3 (in presence of sub-soil water)	per tower	4		
1.2.4.6	Soil type 3 (wet black cotton)	per tower	1		
1.2.4.7	Soil type 4	per tower	1		
1.2.4.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)	per tower	3		
1.2.5	Foundations for Tower Type DE				
1.2.5.1	Soil type 1	per tower	0		
1.2.5.2	Soil type 2 (dry)	per tower	0		
1.2.5.3	Soil type 2 (in presence of sub-soil water)	per tower	0		
1.2.5.4	Soil type 3 (dry)	per tower	0		
1.2.5.5	Soil type 3 (in presence of sub-soil water)	per tower	1		
1.2.5.6	Soil type 3 (wet black cotton)	per tower	0		
1.2.5.7	Soil type 4	per tower	0		
1.2.5.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)	per tower	3		
1.2.6	Foundations for Tower Type UCG				
1.2.6.1	Soil type 1	per tower	0		
1.2.6.2	Soil type 2 (dry)	per tower	0		
1.2.6.3	Soil type 2 (in presence of sub-soil water)	per tower	0		
1.2.6.4	Soil type 3 (dry)	per tower	1		

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
		1	2	3	4=2x3
1.2.6.5	Soil type 3 (in presence of sub-soil water)	per tower	0		
1.2.6.6	Soil type 3 (wet black cotton)	per tower	0		
1.2.6.7	Soil type 4	per tower	0		
1.2.6.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)	per tower	0		
1.2.7	Foundations for Multi Circuit Tower Type 6T				
1.2.7.1	Soil type 1	per tower	0		
1.2.7.2	Soil type 2 (dry)	per tower	1		
1.2.7.3	Soil type 2 (in presence of sub-soil water)	per tower	1		
1.2.7.4	Soil type 3 (dry)	per tower	4		
1.2.7.5	Soil type 3 (in presence of sub-soil water)	per tower	2		
1.2.7.6	Soil type 3 (wet black cotton)	per tower	0		
1.2.7.7	Soil type 4	per tower	0		
1.2.7.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)	per tower	0		
	SUBTOTAL INSTALLATION OF FOUNDATIONS				
1.3	ERECTION OF SELF-SUPPORTING STEEL LATTICE TOWERS COMPLETE WITH ALL BOLTS, NUTS, PLATES, LEG EXTENSIONS, SAFETY DEVICES, ANTI-CLIMBING DEVICES, STEP-BOLTS, ACCESSORIES AND EXTENSIONS				
1.3.1	Normal Suspension Tower Type DA				
1.3.1.1	Basic tower -6 m	pcs	0		
1.3.1.2	Basic tower -3 m	pcs	1		
1.3.1.3	Basic tower ±0 m	pcs	22		
1.3.1.4	Basic tower +3 m	pcs	9		

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
		1	2	3	4=2x3
1.3.1.5	Basic tower +6 m	pcs	4		
1.3.1.6	Basic tower +9 m	pcs	2		
1.3.1.7	Basic tower +12 m	pcs	0		
1.3.1.8	Leg reduction -3.0m	pcs	16		
1.3.1.9	Leg reduction -1.5m	pcs	22		
1.3.1.10	Leg extensions ±0 m	pcs	62		
1.3.1.11	Leg extensions +1.5 m	pcs	22		
1.3.1.12	Leg extensions +3.0 m	pcs	18		
1.3.1.13	Leg extensions +4.5 m	pcs	8		
1.3.1.13	Leg extensions +6.0 m	pcs	4		
1.3.2	Light Angle (0° - 15°) Tension Tower Type DB				
1.3.2.1	Basic tower -6 m	pcs	0		
1.3.2.2	Basic tower -3 m	pcs	5		
1.3.2.3	Basic tower ±0 m	pcs	30		
1.3.2.4	Basic tower +3 m	pcs	7		
1.3.2.5	Basic tower +6 m	pcs	6		
1.3.2.6	Basic tower +9 m	pcs	1		
1.3.2.7	Leg reduction -3.0 m	pcs	10		
1.3.2.8	Leg reduction -1.5 m	pcs	24		
1.3.2.9	Leg extensions ±0 m	pcs	84		
1.3.2.10	Leg extensions +1.5 m	pcs	36		
1.3.2.11	Leg extensions +3.0 m	pcs	22		
1.3.2.12	Leg extensions +4.5 m	pcs	16		
1.3.2.12	Leg extensions +6.0 m	pcs	4		

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
		1	2	3	4=2x3
1.3.3	Medium Angle (15° - 30°) Tension Tower Type DC				
1.3.3.1	Basic tower -6 m	pcs	0		
1.3.3.2	Basic tower -3 m	pcs	1		
1.3.3.3	Basic tower ±0 m	pcs	17		
1.3.3.4	Basic tower +3 m	pcs	5		
1.3.3.5	Basic tower +6 m	pcs	5		
1.3.3.6	Basic tower +9 m	pcs	3		
1.3.3.7	Basic tower +12 m	pcs	1		
1.3.3.8	Leg reduction -3.0 m	pcs	10		
1.3.3.9	Leg reduction -1.5 m	pcs	24		
1.3.3.10	Leg extensions ±0 m	pcs	54		
1.3.3.11	Leg extensions +1.5 m	pcs	16		
1.3.3.12	Leg extensions +3.0 m	pcs	12		
1.3.3.13	Leg extensions +4.5 m	pcs	8		
1.3.3.13	Leg extensions +6.0 m	pcs	4		
1.3.4	Heavy Angle (30°-60°) Tower Type DD				
1.3.4.1	Basic tower -6 m	pcs	0		
1.3.4.2	Basic tower -3 m	pcs	2		
1.3.4.3	Basic tower ±0 m	pcs	10		
1.3.4.4	Basic tower +3 m	pcs	6		
1.3.4.5	Basic tower +6 m	pcs	1		
1.3.4.6	Basic tower +9 m	pcs	0		
1.3.4.7	Leg reduction -3.0 m	pcs	4		
1.3.4.8	Leg reduction -1.5 m	pcs	8		
1.3.4.9	Leg extensions ±0 m	pcs	24		
1.3.4.10	Leg extensions +1.5 m	pcs	14		

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
40444	Law automatican and Gran	1	2	3	4=2x3
1.3.4.11	Leg extensions +3.0 m	pcs	18		
1.3.4.12	Leg extensions +4.5 m	pcs	4		
1.3.4.13	Leg extensions +6.0 m	pcs	4		
1.3.5	Dead End (0°-45° Line/0°-45° Gantry) Tower Type DE				
1.3.5.1	Basic tower -3 m	pcs	0		
1.3.5.2	Basic tower ±0 m	pcs	4		
1.3.5.3	Basic tower +3 m	pcs	0		
1.3.5.4	Basic tower +6 m	pcs	0		
1.3.5.5	Leg reduction -3.0 m	pcs	0		
1.3.5.6	Leg reduction -1.5 m	pcs	2		
1.3.5.7	Leg extensions ±0 m	pcs	12		
1.3.5.8	Leg extensions +1.5 m	pcs	2		
1.3.5.9	Leg extensions +3.0 m	pcs	0		
1.3.5.10	Leg extensions +4.5 m	pcs	0		
1.3.5.11	Leg extensions +6.0 m	pcs	0		
1.3.6	Undercrossing Gantry Tower Type UCG				
1.3.6.1	Basic tower ±0 m	nos	1		
1.3.6.2	Leg extensions ±0 m	pcs	2		
1.3.0.2	Leg extensions to m	pcs	2		
1.3.7	Multi Circuit Angle (0°-50°) Tension Tower Type 6T				
1.3.7.1	Basic tower -6 m	pcs	0		
1.3.7.2	Basic tower -3 m	pcs	0		_
1.3.7.3	Basic tower ±0 m	pcs	6		
1.3.7.4	Basic tower +3 m	pcs	2		
1.3.7.5	Basic tower +6 m	pcs	1		

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
		1	2	3	4=2x3
1.3.7.6	Basic tower +9 m	pcs	0		
1.3.7.7	Leg reduction -3.0 m	pcs	0		
1.3.7.8	Leg reduction -1.5 m	pcs	4		
1.3.7.9	Leg extensions ±0 m	pcs	16		
1.3.7.10	Leg extensions +1.5 m	pcs	8		
1.3.7.11	Leg extensions +3.0 m	pcs	8		
1.3.7.12	Leg extensions +4.5 m	pcs	4		
1.3.7.13	Leg extensions +6.0 m	pcs	0		
	SUBTOTAL ERECTION OF TOWERS				
1.4	STRINGING OF DOUBLE CIRCUIT (SIX PHASES), DOUBLE CONDUCTOR ACSR MOOSE PER PHASE				
	Including: insulator strings assembly, dead ends and jumpers, clipping and sagging, installation of spacer dampers, installation of vibration dampers and armor rods	route km	45		
1.5	STRINGING OF OPGW 48 FIBRES (EQUIVALENT TO 93-A20SA)				
	Including: attachment sets assembly, dead ends and by-pass jumpers, clipping and sagging, installation of vibration dampers, armor rods and warning spheres, installation of joint boxes	route km	45		
1.6	STRINGING OF EARTHWIRE 93-A20SA				
	Including: attachment sets assembly, dead ends and by-pass jumpers, clipping and sagging, installation of vibration dampers, armor rods and warning spheres.	route km	45		
1,7	AVIAN PROTECTION & AIRCRAFT WARNING SYSTEM				
1.7.1	Bird repellent system (spiked steel strips)	per tower	44		
1.7.2	Bird flight diverters	route km	18,5		
1.7.4	Aircraft Warning System	route km	1		

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
		1	2	3	4=2x3
	SUBTOTAL STRINGING OF CONDUCTORS, EARTHWIRES AND OPGW				
1.8	FOUNDATIONS TESTS				
1.8.1	Pad and Chimney foundation	test	lot		
1.8.2	Anchor Rock foundation	test	lot		
1.8.3	Piled foundation	test	lot		
	SUBTOTAL FOUNDATIONS TESTS				
1.9	ADDITIONAL WORKS				
1.9.1	Relocation of existing 33 kV OHL, according to Sub-Section VII-1, clause 6.3 Crossing of existing OHLs.	lump sum	1		
1.9.2	Installation of 132kV tower for connection of autotransformer and gantry in Lekhnath substation as per clause 5.3 of Sub-Section VII-1 including all design verifications, investigations, measurements, material supply and installation works necessary for complete execution.	lump sum	1		
1.9.3	Tower platform protection with slope stabilisation (retaining walls) ingluding all necessary surveys, geotechnical design, material supply and installation works necessary for complete execution.	per tower	30		
1.9.4	Tower platform protection with erosion prevention by installation of drinage swales, biodegradable mats and vegetation seeding including all material supply and installation works necessary for complete execution.	per tower	40		
	TOTAL INSTALLATION OF LEKHNATH - DAMAULI 220 KV				
	DOUBLE CIRCUIT LINE				
2	INSTALLATION OF INTERCONNECTION OF TANAHU - E DAMAULI S/S (LOOF			BLE CIRCUIT LI	NE TO NEW
2.1	PRELIMINARY WORKS				
2.1.1	Temporary access tracks and access route works	lump sum	1		

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
		1	2	3	4=2x3
2.1.2	Survey Works including: angle points identification, line profile survey, towers pegging on site, survey of hill-side extensions, towers protection, towers diagonal profiling	route km	1		
	SUBTOTAL PRELIMINARY WORKS				
2.2	INSTALLATION OF FOUNDATIONS				
	Including: stripping of top soil for re-implementation after backfilling, excavation, placing of blind concrete, stubs setting, earthing system installation, preparing reinforcement steel and concreting (including extended chimneys where required), backfilling and compaction, material removal, cleaning and reinstatement of site				
2.2.1	Foundations for Multi Circuit Angle Tension Tower Type 6T				
2.2.1.1	Soil type 1	per tower	0		
2.2.1.2	Soil type 2 (dry)	per tower	0		
2.2.1.3	Soil type 2 (in presence of sub-soil water)	per tower	0		
2.2.1.4	Soil type 3 (dry)	per tower	g		
2.2.1.5	Soil type 3 (in presence of sub-soil water)	per tower	1		
2.2.1.6	Soil type 3 (wet black cotton)	per tower	0		
2.2.1.7	Soil type 4	per tower	0		
2.2.1.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)	per tower	0		
	SUBTOTAL INSTALLATION OF FOUNDATIONS				
2.3	ERECTION OF SELF-SUPPORTING STEEL LATTICE TOWERS COMPLETE WITH ALL BOLTS, NUTS, PLATES, LEG EXTENSIONS, SAFETY DEVICES, ANTI-CLIMBING DEVICES, STEP-BOLTS, ACCESSORIES AND EXTENSIONS				
2.3.1	Multi Circuit Angle (0°-45°) Tension Tower Type 6T				
2.3.1.1	Basic tower -6 m	pcs	0		
2.3.1.2	Basic tower -3 m	pcs	0		

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
		1	2	3	4=2x3
2.3.1.3	Basic tower ±0 m	pcs	3		
2.3.1.4	Basic tower +3 m	pcs	1		
2.3.1.5	Basic tower +6 m	pcs	0		
2.3.1.6	Basic tower +9 m	pcs	0		
2.3.1.7	Leg reduction -3.0 m	pcs	0		
2.3.1.8	Leg reduction -1.5 m	pcs	2		
2.3.1.9	Leg extensions ±0 m	pcs	8		
2.3.1.10	Leg extensions +1.5 m	pcs	4		
2.3.1.11	Leg extensions +3.0 m	pcs	2		
2.3.1.12	Leg extensions +4.5 m	pcs	0		
	SUBTOTAL ERECTION OF TOWERS				
2.4	STRINGING OF FOUR CIRCUIT (TWELVE PHASES), DOUBLE CONDUCTOR ACSR BISON PER PHASE				
	Including: insulator strings assembly, dead ends and jumpers, clipping and sagging, installation of spacer dampers, installation of vibration dampers and armor rods	route km	2,9		
2.5	STRINGING OF OPGW 48 FIBRES (equivalent to 93-A20SA)				
	Including: attachement sets assembly, dead ends and by-pass jumpers, clipping and sagging, installation of vibration dampers, armor rods, installation of joint boxes	route km	3		
2.6	STRINGING OF EARTHWIRE 93-A20SA				
2.6					
	Including: attachement sets assembly, dead ends and by-pass jumpers, clipping and sagging, installation of vibration dampers, armor rods and warning spheres.	route km	1		
	SUBTOTAL STRINGING OF CONDUCTORS AND OPGW				

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Pric
				CIP	CIP
				(NPR)	(NPR)
		1	2	3	4=2x3
2.7	ADDITIONAL WORKS				
2.7.1	Dismantling of 200 m (span 0B/0 - 0C/0) of existing Tanahu - Bharatpur 220 kV double circuit Line, including removal of conductors/earthwire/OPGW and related insulator strings/attachement sets and transport to Employer's designated storage area, according to document B1, Scope of Supply and Services.	lump sum	1		
2.7.2	Relocation of approximately 300m of 33kV line between AP62 and AP63, including any necessary design services, additional material supply and installation works for complete execution	lump sum	1		
	TOTAL INSTALLATION OF INTERCONNECTION OF TANAHU - BHARATPUR 220 KV DOUBLE CIRCUIT LINE TO NEW DAMAULI S/S (LOOP IN - LOOP OUT)				
3	INSTALLATION OF INTERCONNECTION OF OLD DAMAUL DAMAULI S/S (LOOF			INGLE CIRCUIT	LINE TO NE
3.1	PRELIMINARY WORKS				
3.1.1	Temporary access tracks and access route works	lump sum	1		
3.1.2	Survey Works including: angle points identification, line profile survey, towers pegging on site, survey of hill-side extensions, towers protection, towers diagonal profiling	route km	0,45		
	SUBTOTAL PRELIMINARY WORKS				

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
		1	2	3	4=2x3
3.2	INSTALLATION OF FOUNDATIONS				
	Including: stripping of top soil for re-implementation after backfilling, excavation, placing of blind concrete, stubs setting, earthing system installation, preparing reinforcement steel and concreting (including extended chimneys where required), backfilling and compaction, material removal, cleaning and reinstatement of site				
3.2.1	Foundations for Tower Type DE				
3.2.1.1	Soil type 1	per tower	0		
3.2.1.2	Soil type 2 (dry)	per tower	0		
3.2.1.3	Soil type 2 (in presence of sub-soil water)	per tower	0		
3.2.1.4	Soil type 3 (dry)	per tower	1		
3.2.1.5	Soil type 3 (in presence of sub-soil water)	per tower	1		
3.2.1.6	Soil type 3 (wet black cotton)	per tower	0		
3.2.1.7	Soil type 4	per tower	0		
3.2.1.8	Piled foundations (wet black cotton >3.5m deep or frustum angle <10°)	per tower	1		
	SUBTOTAL INSTALLATION OF FOUNDATIONS				
3.3	ERECTION OF SELF-SUPPORTING STEEL LATTICE TOWERS COMPLETE WITH ALL BOLTS, NUTS, PLATES, LEG EXTENSIONS, SAFETY DEVICES, ANTI-CLIMBING DEVICES, STEP-BOLTS, ACCESSORIES AND EXTENSIONS				
3.3.1	Dead End (0°-45° Line/0°-45° Gantry) Tower Type DE				
3.3.1.2	Basic tower -3 m	pcs	0		
3.3.1.3	Basic tower ±0 m	pcs	1		
3.3.1.4	Basic tower +3 m	pcs	2		
3.3.1.5	Basic tower +6 m	pcs	0		
3.3.1.7	Leg reduction -3.0 m	pcs	0		
3.3.1.8	Leg reduction -1.5 m	pcs	0		
3.3.1.9	Leg extensions ±0 m	pcs	8		
3.3.1.10	Leg extensions +1.5 m	pcs	4		
3.3.1.11	Leg extensions +3.0 m	pcs	0		

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
		1	2	3	4=2x3
3.3.1.12	Leg extensions +4.5 m	pcs	0		
	SUBTOTAL ERECTION OF TOWERS				
3.4	STRINGING OF DOUBLE CIRCUIT (SIX PHASES), SINGLE CONDUCTOR ACSR WOLF PER PHASE				
	Including: insulator strings assembly, dead ends and jumpers, clipping and sagging, installation of vibration dampers and armor rods	route km	0,45		
3.5	STRINGING OF SINGLE CIRCUIT (THREE PHASES), SINGLE CONDUCTOR ACSR WOLF PER PHASE				
	Including: insulator strings assembly, dead ends and jumpers, clipping and sagging, installation of vibration dampers and armor rods	route km	0,55		
3.6	STRINGING OF EARTHWIRE 66-A20SA				
	Including: attachment sets assembly, dead ends and by-pass jumpers, clipping and sagging, installation of vibration dampers, armor rods.	route km	1		
3.7	STRINGING OF OPGW 96 FIBRES (equivalent to 66-A20SA)				
	Including: attachment sets assembly, dead ends and by-pass jumpers, clipping and sagging, installation of vibration dampers, armor rods.	route km	0,45		
	SUBTOTAL STRINGING OF CONDUCTORS AND EARTHWIRE				
3.8	ADDITIONAL WORKS				
3.0	ADDITIONAL WORKS				
3.8.1	Complete dismantling of one existing tower and correspoding foundations up to a depth of 1.0 m below ground level, insulator strings and earthwire attachements, including transportation and storage of resulted materials to NEA designated warehouse, according to Sub-Section VII-1 of Employer's Requirements	lump sum	1		
3.8.2	Stringing of 2 spans (conductor and earthwire) between the adjacent existing 132 kV single circuit towers and new DE tower including all preparatory works and coordination with NEA	lump sum	1		

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP (NPR)
				(NPR)	
		1	2	3	4=2x3
	TOTAL INSTALLATION OF INTERCONNECTION OF OLD DAMAULI - BHARATPUR 132 KV SINGLE CIRCUIT LINE TO NEW DAMAULI S/S (LOOP IN - LOOP OUT)				
4	OTHER WORKS A	ND SERVIC	ES		
4.1	TYPE TESTS				
4.1.1	Towers Type tests (including tower supply, erection and dismantling)				
4.1.1.1	Type test to destruction of Normal Suspension Tower Type DA	pcs	1		
4.1.1.2	Ultimate loading test of Tension Tower Type DB	pcs	1		
4.1.1.3	Ultimate loading test of Tension Tower Type DC	pcs	1		
4.1.1.4	Ultimate loading test of Tension Tower Type DD	pcs	1		
4.1.1.5	Ultimate loading test of Tension Tower Type 6T	pcs	1		
4.1.2	Insulator Strings Type Tests (for complete string including insulators and associated hardware)				
4.1.2.1	220 kV Single Suspension String for Twin ACSR Moose	set	1		
4.1.2.2	220 kV Double Suspension String for Twin ACSR Moose	set	1		
4.1.2.3	220 kV Double Tension String for Twin ACSR Moose	set	1		
	OPGW Type Tests (Tests description according to Data				
4.1.3	Sheets)				
4.1.3.1	OPGW 48 FIBRES (EQUIVALENT TO 93-A20SA)	set	1		
	SUBTOTAL TYPE TESTS				
4.2	TRAINING OF EMPLOYER'S STAFF				
	Overseas professional training (including costs for air tickets, accommodation and daily allowance)				
4.2.1	- Towers and Foundation design (2 persons, 10 working days)	lot	1		
4.2.2	PLS CADD (Standard + FE edition) license registered to the Employer	pcs	1		

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Kreditanstalt für Wiederaufbau (KfW)

#### **NEPAL ELECTRICITY AUTHORITY (NEA)**

Item	Description	Unit	Quantity	Unit Price	Total Price
				CIP	CIP
				(NPR)	(NPR)
		1	2	3	4=2x3
4.2.3	PLS Tower license registered to the Employer	pcs	1		
4.2.4	On site optical fiber technology and optical fiber (OPGW and OPUG) installation, cable testing, maintenance (7 persons, 7 working days)	lot	1		
4.2.5	On Site Training during erection works, testing and commissioning (7 persons, 7 working days)	lot	1		
	SUBTOTAL TRAINING				
4.3	Project comunication and visibility services	lump sum	1		
	SUBTOTAL PROJECT COMMUNICATION AND VISIBILITY SERVICES				
	TOTAL OTHER SERVICES				
	5. ADDITIONAL WO	RKS	<u> </u>		
	TOTAL (to Schedule No. VI Grand Summary)				
		Name of Bidd	der:		
		Signature of	Bidder:		
		Signature of	Bidder:		

# Schedule V

**ESMMP Requirements** 

#### Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Schedule No.V: ESHS Requirements

Item	Description	Unit	Quantity	Total (NPR)
1.1	Resources allocated to ESHS management as per the ESMP requirements	Lump sum	1	
1.2	Required tools, equipment, facilities (toilets/cabin/tents/security), and transportation for Archaeological Clerk of Works for any archaeological excavations required (Archaeological Clerk of Work appointed by NEA)	Lump sum	1	
1.3	Required tools, equipment, facilities (toilets/cabin/tents/security), and transportation for Biodiveristiy Clerk of Work to sites required (Biodiversity Clerk of Work appointed by NEA)	Lump sum	1	
1.4	Drafting and updating the ESHS documentation, reporting, inspections as per the ESMP requirements	Lump sum	1	
1.5	Implementation of the Health and Safety Plan: meetings, health care center, medical check-ups, emergencies and evacuations, safety protective equipment, hygiene as per the ESMP requirements	Lump sum	1	
1.6	Accommodation, drinking water, meals and transportation of staff(*) as per the ESMP requirements (*): The Bidder shall detail the financial conditions of the supply of accommodation, meals and transport to its staff:			
1.6.1	- Accommodation	Lump sum	1	
1.6.2	- Meals	Lump sum	1	
1.6.3	- Transport	Lump sum	1	
1.7	Local recruitment and training management costs	Lump sum	1	
1.8	Biodiversity studies, surveys and related activites as per ESMP requirements	Lump sum	1	
1.9	Temporary access rights, land take and compensation as per the ESMP requirements	Lump sum	1	
1.10	RoW vegetation and tree removal as per ESMP requirements	Lump sum	1	
1.11	Protection of the biodiversity, adjacent areas, prevention of erosion at work sites and access tracks as per the ESMP requirements	Lump sum	1	
1.12	Traffic, noise and atmospheric emissions management as per the ESMP requirements	Lump sum	1	
1.13	Contamination studies, wastewater, waste and hazardous products mangement as per the ESMP requirements	Lump sum	1	
1.14	Site reinstatement as per the ESMP requirements	Lump sum	1	
1.15	Other material, equipment or studies not specifically mentioned but deemed necessary based on ESMP requirements	Lump sum	1	
	TOTAL (to Schodulo No. VI Crond Summore)			
	TOTAL (to Schedule No. VI Grand Summary)			

Name of Bidder:

Signature of Bidder:

## Schedule VI

**Grand Summary** 

### Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Schedule No. VI: Grand Summary

Schedule	Description	Total
		(USD + NPR)
1	Plant and Mandatory Spare Parts supplied from abroad	
2	Plant and Mandatory Spare Parts supplied from within the Employer's Country	
3	Design Services	
4	Installation and Other Services	
5	ESHS Requirements	
6	TOTAL (to Bid Form)	
	Name of Bidder:	
	Signature of Bidder:	

## Schedule VII

**Recommended Spare Parts** 

Lekhnath - Damauli 220 kV Double Circuit Line; Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S

Schedule No. VII: Recommended Spare Parts and Tools

Item	Description	Country of Origin	Unit	Quantity	Unit Price	Total
					CIP	CIP
					(USD)	(USD)
			1	2	3	4 = 2x3
•		•		'	Name of Bidder:	

# Schedule VIII

Optional Items Equipment

### Package A OHL: Lekhnath - Damauli 220 kV Double Circuit Line;

Interconnection of Tanahu - Bharatpur 220 kV Double Circuit Line to New Damauli S/S; Interconnection of Old Damauli - Lekhnath 132 kV Single Circuit Line to New Damauli S/S Schedule No. VIII: Optional Items

Item	Description	Unit	Quantity	Unit Price	Total Pri
				CIP	CIP
				(USD)	(USD)
		1	2	3	4=2x3
1.	Tower Design Licence				
1.1	Licence of Tower and Foundation Design for Package A OHL (220 kV towers and related foundations)	Lump sum	1		
	Total amount:				
				Name of Bidder:	
				Name of Bidder:	
				Signature of Bido	

#### **List of Deviations and Cost Impact (Form)**

[List of Deviations Form shall be submitted even in case of no deviations. In that case, the Bidder shall include the remark "no deviations" and shall sign/stamp the form.

Form: List of Deviation and Cost impact shall be submitted with Financial Proposal.

The Bidder is meeting the requirements laid down in Part II - Employer's Requirements and Part III - Conditions of Contract (CC) and Contract Forms in all respects, other than those listed below.

Non-material deviations mentioned in the text or drawings forming part of the Bid, but not contained in this list, <u>will be considered as nil and void</u> and the respective parts of the Works will be treated as fully in line with the requirements of this Bidding Document.

The Employer reserves the right to accept or reject any deviation.

No	Reference (please state Vol., Part, Sec. etc.)	Deviation from Specifications	Cost Impact +/-

### Section V. Eligibility Criteria

#### **Eligibility in KfW-Financed Procurement**

- Consulting Services, Works, Goods, Plant and Non-Consulting Services are eligible for KfW financing regardless of the country of origin of the Contractors (including Subcontractors and suppliers for the execution of the Contract), except where an international embargo or sanction by the United Nations, the European Union or the German Government applies.
- 2. Applicant/Bidders (including all members of a Joint Venture and proposed or engaged Subcontractors) shall not be awarded a KfW-financed Contract if, on the date of submission of their Application/Offer or on the intended date of Award of a Contract, they:
  - 2.1 are bankrupt or being wound up or ceasing their activities, are having their activities administered by courts, have entered into receivership, or are in any analogous situation

#### 2.2 have been

- (a) convicted by a final judgement or a final administrative decision or subject to financial sanctions by the United Nations, the European Union and/or the German Government for involvement in a criminal organisation, money laundering, terrorist-related offences, child labour or trafficking in human beings; this criterion of exclusion is also applicable to legal Persons, whose majority of shares are held or factually controlled by natural or legal Persons which themselves are subject to such convictions or sanctions
- (b) convicted by a final court decision or a final administrative decision by a court, the European Union or national authorities in the Partner Country or in Germany for Sanctionable Practice during any Tender Process or the performance of a Contract or for an irregularity affecting the EU's financial interests, unless they provide supporting information together with their Declaration of Undertaking (Form available as Appendix to the Application/Offer which shows that this conviction is not relevant in the context of this Contract and that adequate compliance measures have been taken in reaction
- 2.3 have been subject within the past five years to a Contract termination fully settled against them for significant or persistent failure to comply with their contractual obligations during Contract performance, unless this termination was challenged, and the dispute resolution is still pending or has not confirmed a full settlement against them
- 2.4 have not fulfilled applicable fiscal obligations regarding payments of taxes either in the country where they are constituted or the PEA's country
- 2.5 are subject to an exclusion decision of the World Bank or any other multilateral development bank and are listed in the respective table with debarred and cross-debarred firms and individual available on the World Bank's website or any other multilateral development bank unless they provide supporting information together with their Declaration of Undertaking which shows that this exclusion is not relevant in the context of this Contract or
- 2.6 have given misrepresentation in documentation requested by the PEA as part of the Tender Process of the relevant Contract.

3. State-owned entities may compete only if they can establish that they (i) are legally and financially autonomous, and (ii) operate under commercial law. To be eligible, a state-owned entity shall establish to KfW's satisfaction, through all relevant documents, including its charter and other information KfW may request, that it: (i) is a legal entity separate from their state (ii) does not currently receive substantial subsidies or budget support; (iii) operates like any commercial enterprise, and, inter alia, is not obliged to pass on its surplus to their state, can acquire rights and liabilities, borrow funds and be liable for repayment of its debts, and can be declared bankrupt.

### Section VI. KfW Policy - Sanctionable Practice - Social and Environmental Responsibility

#### Sanctionable Practice

The PEA and the Contractors (including all members of a Joint Venture and proposed or engaged Subcontractors) must observe the highest standard of ethics during the Tender Process and performance of the Contract.

By signing the Declaration of Undertaking the Contractors declare that (i) they did not and will not engage in any Sanctionable Practice likely to influence the Tender Process and the corresponding Award of Contract to the PEA's detriment, and that (ii) in case of being awarded a Contract they will not engage in any Sanctionable Practice.

Moreover, KfW requires to include in the Contracts a provision pursuant to which Contractors must permit KfW and in case of financing by the European Union also to European institutions having competence under European law to inspect the respective accounts, records and documents relating to the Tender Process and the performance of the Contract, and to have them audited by auditors appointed by KfW.

KfW reserves the right to take any action it deems appropriate to check that these ethics rules are observed and reserves in particular the rights to:

- (a) reject an Offer for Award of Contract if during the Tender Process the Bidder who is recommended for the Award of Contract has engaged in Sanctionable Practice, directly or by means of an agent in view of being awarded the Contract
- (b) declare misprocurement and exercise its rights on the ground of the Funding Agreement with the PEA relating to suspension of disbursements, early repayment and termination if, at any time, the PEA, Contractors or their legal representatives or Subcontractors have engaged in Sanctionable Practice during the Tender Process or performance of the Contract without the PEA having taken appropriate action in due time satisfactory to KfW to remedy the situation, including by failing to inform KfW at the time they knew of such practices.

KfW defines, for the purposes of this provision, the terms set forth below as follows:

Coercive Practice	The impairing or harming, or threatening to impair or harm, directly
	or indirectly, any person or the property of the person with a view to

influencing improperly the actions of a person.

**Collusive Practice** An arrangement between two or more persons designed to achieve

an improper purpose, including influencing improperly the actions

of another person.

**Corrupt Practice** The promising, offering, giving, making, insisting on, receiving, ac-

cepting or soliciting, directly or indirectly, of any illegal payment or undue advantage of any nature, to or by any person, with the intention of influencing the actions of any person or causing any person

to refrain from any action.

**Fraudulent Practice** Any action or omission, including misrepresentation that knowingly

or recklessly misleads, or attempts to mislead, a person to obtain a

financial benefit or to avoid an obligation.

#### **Obstructive Practice**

Means (i) deliberately destroying, falsifying, altering or concealing evidence material to the investigation or the making of false statements to investigators, in order to materially impede an official investigation into allegations of a Corrupt Practice, Fraudulent Practice, Coercive Practice or Collusive Practice, or threatening, harassing or intimidating any Person to prevent them from disclosing their knowledge of matters relevant to the investigation or from pursuing the investigation, or (ii) any act intended to materially impede the exercise of KfW's access to contractually required information in connection with an official investigation into allegations of a Corrupt Practice, Fraudulent Practice, Coercive Practice or Collusive Practice.

#### **Sanctionable Practice**

Any Coercive Practice, Collusive Practice, Corrupt Practice, Fraudulent Practice or Obstructive Practice (as such terms are defined herein) which is unlawful under the Financing Agreement.

#### 2. Social and Environmental Responsibility

Projects financed in whole or partly in the framework of Financial Cooperation have to ensure compliance with international Environmental, Social, Health and Safety (ESHS) standards (including issues of sexual exploitation and abuse and gender-based violence) Contractors in KfW-financed projects shall consequently undertake in the respective Contracts to:

- (a) comply with and ensure that all their Subcontractors and major suppliers, i.e. for major supply items comply with international environmental and labor standards, consistent with applicable law and regulations in the country of implementation of the respective Contract and the fundamental conventions of the International Labor Organization<sup>24</sup> (ILO) and international environmental treaties and;
- (b) implement any environmental and social risks mitigation measures, as identified in the environmental and social impact assessment (ESIA) and further detailed in the environmental and social management plan (ESMP) as far as these measures are relevant to the Contract and implement measures for the prevention of sexual exploitation and abuse and gender-based violence.

<sup>&</sup>lt;sup>24</sup> In case ILO conventions have not been fully ratified or implemented in the Employer's country the Bidder/Bidder/Contractor shall, to the satisfaction of the Employer and KfW, propose and implement appropriate measures in the spirit of the said ILO conventions with respect to a) workers grievances on working conditions and terms of employment, b) child labour, c) forced labour, d) worker's organisations and e) non-discrimination.