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 B: Substations

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 B: Substations

(Lekhnath 220/132 kV Substation and Damauli 220/132/33/11 kV Substation)

Issued on	**:**	**09 September 2022**
Invitation for Bids No.	**:**	**ICB/NEA/LD220KVTLP/Package-B**
Procurement No.		**BMZ201667773/KfW508598**
ICB No.	**:**	**ICB/NEA/LD220KVTLP/Package-B**
Employer	**:**	**Nepal Electricity Authority**
Country	**:**	**Nepal**

Document approval

	Name	Signature	Position	Date
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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 B: Substations

BMZ No.: 2016 67 773; KfW No.: 508598

The *NEPAL Electricity Authority (NEA) has received* financing (Grant) 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 B: Substations*. 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 B: Substations. In Lekhnath the new 220 kV switchgear will be connected to the existing 132 kV AIS outdoor switchyard by means of 220/132 kV transformer, and the existing 132 kV yard will be extended accordingly. For the new 220 kV substation, an indoor double bus bar system SF6 GIS type has been selected. In Damauli, a new 132 kV switchyard shall be constructed together with the 220 kV substation. An indoor, double bus bar system SF6 Gas Insulated Switchgear (GIS) type has been selected for both substations. The Substations 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 35,000,000.
- 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 6,000,000.00 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[1] 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 8,000,000.00.
    - One of the above-mentioned contracts or other contracts shall be outside of the Bidder's home country that has been successfully or substantially completed in the geographical2 region or in Asia.
    - One of the contracts above mentioned or others 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 10 years, incl. construction, upgrading and rehabilitation of substations which have a similar characteristic (>= 220kV).

- 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 Substation contracts 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).

[1] Substantial completion shall be based on 80% or more works completed under the contract.

[2] 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: ld220kvtlp@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.

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PART 1 – BIDDING PROCEDURES

Section I. Instructions to Bidders

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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:

(d) Directly or indirectly controls, is controlled by or is under common control with another Bidder; or

(e) Receives or has received any direct or indirect subsidy from another Bidder; or

(f) Has the same legal representative as another Bidder; or

(g) 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

(h) 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

(i) 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

(j) Any of its affiliates has been hired (or is proposed to be hired) by the Employer as Engineer for the Contract implementation; or

(k) 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 so 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 so 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

(i) 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 Employer'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:

(i) Affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or

(ii) Limit in any substantial way, inconsistent with the Bidding 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.

42. Employer's Right to Reject All Bids

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	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-B The number and identification of lots (contracts) comprising this ICB is (two) 2; i.e. • **Package A: Transmission Lines and** • **Package B: Substations.** The present Bidding Documents is relevant to **Package B: Substations.**
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. The legal and financial autonomy needs to be certified by an international auditor.
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 • Section VI. KfW Policy - Corrupt and Fraudulent Practices - Social and Environmental Responsibility **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 Specifications • 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: ld220kvtlp@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 e-mail 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
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 **Technical Bid** (strictly 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 to ITB 20.1 (iii) In the case of a Technical Bid submitted by a JV, a certified copy[3] of **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. If the Bidder is not a JV or intended JV, this part shall be indicated by the Bidder as "Not applicable" (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

[3] 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. Certication provided by a notary or other competent authority shall be accompanied by apostille certificate.

	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 so 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 *shall not* be permitted under ITB 13.2 / ITB 13.3 / 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 Post Qualification.
ITB 16.2	The Employer intend to use a nominated Subcontractor for the following Part: "Integration of the 220kV extension in Lekhnath and the forthcoming 220/132/33/11kV New Damauli substation into the existing National Load Dispatch Center/Emergency Control Center (LDC /ECC) shall be included in the scope of deliverables and services provided by the Contractor of the Project. as described in PART II, Employer's Requirements, Section VII-1 Project Description and Scope of Works." Therefore, for this specific part of work and services, the following subcontractor shall be considered by the Bidder in his Bid: • Original Manufacturer Load Dispatch Center, Siemens Ltd, India
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 B: Substations
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 project sites

ITB 17.7	The prices quoted by the Bidder shall be: *fixed*. Price Adjustment shall apply for the Power Transformers 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 **USD** and Local Portion Price Schedule II, IV and V in **NPR (Nepalese Rupee)**.
ITB 19.1	The bid validity period shall be *180 days.*
ITB 20.1	The amount and currency of the Bid Security shall be: 1,*250,000.00 USD*
ITB 21.1	In addition to the originals of the Technical and Financial Bids, the number of copies is: *two (2)* paper copies, each including one (1) digital copy (USB). In the digital copy of the Bid, the length of the file path 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. 27, Kaski, Gondaki Province, Nepal City: *Pokhara* ZIP Code: *33700* Country: *Nepal* Date: **14 November 2022** Time: **14:00 hour (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 qualification criteria to perform the Contract in accordance with Section III, Evaluation and Qualification Criteria. Any bids found to be not eligible and not qualified, resultantly not meeting the eligibility and qualification criteria set in the bidding documents, 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 substantially 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 - Employer's Requirements) shall be determined by using the method specified in Section III Clause 2.1. A Bid for which the ESHS Methodology 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 Bidders 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 accordance 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: **No.**
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.
F. Evaluation 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 <u>shall not</u> 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				Documentation Requirements / Forms
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			
				All Parties Combined	Each Member	One Member	
1. Eligibility							
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 attachments
1.2	**Conflict of Interest**	No conflicts of interest in accordance with ITB4.2	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 requirement	Must meet requirement	N/A	Forms ELI-1.1, 1.2(a) and 1.2(b), with attachments
2. Historical Contract Non-Performance							
2.1	**History of Non-Performing 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 requirement	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

Criteria			Requirements / Max. Scores				Documentation Requirements / Forms
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			
				All Parties Combined	Each Member	One Member	
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 6,000,000.00** 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 attachments 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 attachments

Criteria			Requirements / Max. Scores				Documentation Requirements / Forms
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			
				All Parties Combined	Each Member	One Member	
		a) Liquidity ratio ≥ 1.0 $\frac{Current\ Assets}{Current\ Liabilities} \geq 1.0$ b) Indebtedness ratio ≤ 85% $\frac{Total\ Liabilities * 100}{Total\ Assets} \leq 85\%$					
3.4	**Average Annual Construction Turnover**	Minimum annual construction turnover of **USD 35,000,000.00** for the last *5* 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 *[seventy-five] [75]%* of the requirement	Form FIN–3.2
4. Construction Experience							
4.1	**General Construction Experience**	Experience under construction contracts in the role of prime contractor or 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
4.2 (a)	**Specific Construction & Contract Management**	Similar[4] contracts, satisfactorily and substantially[5] completed as a prime contractor or joint venture	Must meet requirement	Must meet requirement	Each JV member shall	In case of JV, the leading	Form EXP-4.2 (a)

[4] 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.
[5] Substantial completion shall be based on 80% or more works completed under the contract.

Criteria			Requirements / Max. Scores				Documentation Requirements / Forms
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			
				All Parties Combined	Each Member	One Member	
	Experience	member[6], in at least 3 contracts 220kV or above AIS or GIS Substations, between 1st January 2012 and application submission deadline of minimum value USD 8,000,000.00. • One of the contracts above shall be outside of the Bidder's home country that has been successfully or substantially completed in the similar geographical[7] region or in Asia. • Further, one of the above-mentioned contracts or other contracts shall be carried out in Nepal. In case of JV, each JV member shall provide one contract in Nepal. In addition, the Bidder (in case of JV the leading member) shall provide evidence about local presence in Nepal within the last 10 years. Local presence means, the construction, upgrading and rehabilitation of substations which			provide one contract in Nepal.	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.	

[6] 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.
[7] 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				Documentation Requirements / Forms
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			
				All Parties Combined	Each Member	One Member	
		have similar characteristics at 220 kV or above voltage level. Evidence shall be provided in form of Taking-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 joint venture member, management contractor or subcontractor[4] 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 completed[8]: At least 3 contracts for preparation of detailed engineering design, supply, delivery, installation, testing and commissioning for 220 kV GIS Substations or above within last 10 years (i.e. since 1st January 2012 and Bid submission	Must meet requirement	Must meet requirement	Each JV member shall provide at least one contract meeting this requirement.	In case of JV the leading partner shall provide at least two contracts meeting this requirement.	Form EXP–4.2 (b)

[8] 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			Requirements / Max. Scores				Documentation Requirements / Forms
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			
				All Parties Combined	Each Member	One Member	
		deadline); Note: Bidders are required to have In-house design team. Note: The In-house design team shall be covered by the Bidder and shall be not subcontracted. In case of an JV 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. All staff will be interviewed in English prior to start of the construction works by the Employer/Engineer. The Employer/Engineer reserves the right to not approve proposed staff for the In-house design team in case of insufficient English knowledge.					

Criteria			Requirements / Max. Scores				Documentation Requirements / Forms
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			
				All Parties Combined	Each Member	One Member	
5. Environmental and Social and Health and Safety (ESHS) 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 - Environmental management certificate ISO 14001:2014 - Health and Safety certificate OHSAS 18001 or ISO45001	Must meet requirement	N/A	Must meet requirement, if part in JV is substantial (more than 40 (forty) % of the works)	Must meet requirement	Form CER-5.1 Form CER-5.1 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[9] on or after the first day of the calendar year during the period stipulated in 4.2(a) above, a minimum specific experience relating to the	Max. 30 points (For splitting of the points see EXP-5.2)	Max. 30 points[11]	N/A	Must have executed at least 3 contract(s) demonstrating experience with the key ESHS requirements as listed in the Requirements column.	Form EXP–5.2

[9] 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.
[11] 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			Requirements / Max. Scores				Documentation Requirements / Forms
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			
				All Parties Combined	Each Member	One Member	
		following ESHS requirements[6]: 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					
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 Eligibility & Qualification Evaluation of Bids. The sub-criterion score will be calculated by adding the requirement scores.	Max. 10 points (For splitting of the points see ENV-5.3)	Max. 10 points[7]	N/A	N/A	Form ENV-5.3
5.4	**Occupational Health**	The Bidder must demonstrate that	Max. 10	Max. 10 points[12]	N/A	N/A	Form OHSAS-

[10] HSEMP shall fulfill all requirements of the PA-ESMP, as provided in Section VII
[12] 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			Requirements / Max. Scores				Documentation Requirements / Forms
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			
				All Parties Combined	Each Member	One Member	
	and Safety Capacity	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	points (For splitting of the points see OHSAS-5.4)				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 note in 5.3. above	Max. 20 points (For splitting of the points see LOC-5.5)	Max. 20 points[8]	N/A	N/A	Form LOC-5.5
5.6 a)	**ILO Core Labor Standards**	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 note in 5.3. above.	Max. 10 points (For splitting of the points see COC-5.6)	Max. 10 points[8]	N/A	N/A	Form COC-5.6

Criteria			Requirements / Max. Scores				Documentation Requirements / Forms
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			
				All Parties Combined	Each Member	One Member	
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.

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[13] (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	Substation GIS Expert	10	7
7	Substation Design Engineer	10	7
8	Telecommunication Specialist	10	7
9	Protection & Control Specialist	10	7
10	SCMS Specialist	10	7
11	Civil Engineer	10	7
12	Commissioning Manager	10	7
13	Geotechnical Engineer	10	7
14	Environmental, Health & Safety Engineer/s	10	5

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.

[13] The similarity shall be based on physical size, complexity, methods, technology or other characteristics as described in Part 2 - Employer's Requirements.

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.

	Key Equipment Type and Characteristics	Minimum number required
1	Equipment for transportation and installation of transformers (with/without oil) to the site:	
	• heavy duty vehicle/truck	1
	• heavy load crane	1
	• On site moving/installation system	1
	• oil treatment facility	1
2	Hydraulic crane	2

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

The Bidder shall state the guaranteed performance or efficiency in response to the Employer's Requirements and the associated Technical Data Sheets.

Specifically, for transformers (the term is used collectively to refer to power transformers, autotransformers, auxiliary transformers, reactors etc. to be delivered under the Contract), the following values will be used for evaluation purposes:

- Capitalized value of no-load losses: USD 5,500 per kW
- Capitalized value of load losses: USD 2,500 per kW
- Capitalized value of auxiliary losses USD 500 per kW

For further information, reference is made to the Technical Requirements and the relevant part corresponding to the determination of transformer losses.

For comparison of Bid prices and evaluation purposes only, the capitalized losses as above will be added to the submitted Bid price for each Bidder. The values of the losses will be derived from the Technical Data Sheets, as filled-in by the Bidder.

(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

Letter of Technical Bid

[The Bidder shall prepare his Letter of Bid on a Letterhead paper specifying his name and address]

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 ITB 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 on 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 on behalf of the Bidder******_____

Title of the person signing the Bid_____

Signature of the person named above_____

Date signed _____ day of _____, _____

*****: In the case of the Bid submitted by a JV specify the name of the JV as Bidder

**: 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")[15] 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

   2.7) being guilty of misrepresentation in supplying the information required as condition to participation in this Tender Procedure.

[14] 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".
[15] 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.

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 Applicant 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:

      i. 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. 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[16] (ILO) and international environmental treaties.

[16] 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.

Moreover, we shall implement environmental and social risks mitigation measures when specified in the relevant 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 behalf of[17]: _____

Signature: Dated:

[17] 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 Bidder/Bidder shall attach a power of attorney from the Bidder/Bidder.

Form of Bid Security

Beneficiary: *[Insert name and Address of Purchaser]*

Date: *[Insert date of issue]*

BID GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that *[Insert name and address of the bidder, which in the case of a joint venture shall be the name and address of the joint venture]* (hereinafter called "the Bidder") has submitted or will submit to the Beneficiary its bid (hereinafter called "the Bid") for the execution of *[Insert project, object of the contract/brief description of the works]* under International Competitive Bidding No. *[Insert ICB number].*

Waiving all objections and defences, we, as Guarantor, hereby irrevocably and independently undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[Insert guarantee amount and currency in words and figures]* upon receipt by us of the Beneficiary's first demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Bidder:

(a) Has withdrawn its Bid during the period of bid validity set forth in the Bidder's Bid Submission Form (the Bid Validity Period"); or

(b) Having been notified of the acceptance of its Bid by the Beneficiary during the Bid Validity Period, (i) has failed to sign the contract agreement, or (ii) has failed to furnish the performance security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee shall expire not later than *[Insert expiry date]*[18].

By this date we must have received any claims for payment by letter or encoded telecommunication.

It is understood that you will return this guarantee to us on expiry or after payment of the total amount to be claimed hereunder.

[As preferred option regarding guarantee rules insert[19]*:* This guarantee is subject to the Uniform Rule for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.*]*

Place, date

Guarantor's authorized signature(s)

[18] Pursuant to ITB Clause 19.3 the guarantee must be valid for at least 42 days beyond the bid validity.

[19] 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 addenda]*

(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 _____of _____pages

Bidder's name *[insert full name]*
In case of Joint Venture (JV), name of each member: *[insert full name of each member in JV]*
Bidder's actual or intended country of registration: *[indicate country of Constitution]*
Bidder's actual or intended year of constitution: *[indicate year of Constitution]*
Bidder's legal address [in country of registration]: *[insert street/ number/ town or city/ country]*
Bidder's legal structure and ownership structure Legal structure: *[provide details]* Ownership structure: *[provide details of direct and indirect ownership]*
Bidder'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 ITB 4.1. ☐ In case of JV, JV agreement, in accordance with ITB 4.1 or Declaration of Association as per ELI 1.2(b). ☐ In case of Government-owned enterprise or institution, in accordance with ITB 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 (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: _____
Page _____ of _____ 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

Non-Performed Contracts in accordance with Section III, Qualification and Evaluation			
☐ Contract non-performance did not occur since 1st January *[insert current year number less 5]* specified in Section III, Qualification and Evaluation, Sub-Factor 2.1. ☐ Contract(s) not performed since 1st January *[insert current year number less 5]* specified in Section III, Qualification and Evaluation, requirement 2.1			
Year	**Non-performed portion of contract**	**Contract Identification**	**Total Contract Amount (current value, currency, exchange rate and USD equivalent)**
[insert year]	*[insert amount and percentage]*	Contract Identification: *[indicate complete contract name/ number, and any other identification]* Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]* Reason(s) for non-performance: *[indicate main reason(s)]*	*[insert amount]*

Pending Litigation, in accordance with Section III, Qualification and Evaluation			
☐ No pending litigation in accordance with Section III, Qualification and Evaluation, Sub-Factor 2.3.			
☐ Pending litigation in accordance with Section III, Qualification and Evaluation, Sub-Factor 2.3 as indicated below.			
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 or being dealt with by the Judiciary]*	*[insert amount]*

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

2. 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[20] for the *[number]* years required above; and complying with the requirements

[20] 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 calendar year]	*[insert amount and indicate currency]*	*[insert exchange rates used to calculate the USD equivalent]*	*[insert USD equivalent]*
		Average Annual Construction Turnover *	

* 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 ITB 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 "Subcontractor" 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 "Subcontractor" 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 "Subcontractor" 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]*	**Information**			
Contract Identification	*[insert contract name and number, if applicable]*			
Award date	*[insert day, month, year, i.e., 15 June 2015]*			
Completion date	*[insert day, month, year, i.e., 03 October 2017]*			
Role in Contract *[check the appropriate box]*	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Sub-contractor ☐
Total Contract Amount	*[insert total contract amount in local currency]*		USD *[insert Exchange rate and total contract amount in USD equivalent]*	
If member in a JV or subcontractor, specify participation in total Contract amount	*[insert a percentage amount]*	*[insert total contract amount in local currency]*	*[insert exchange rate and total contract amount in USD equivalent]*	
Employer's Name:	*[insert full name]*			
Address: Telephone/fax number E-mail:	*[indicate street / number / town or city / country]* *[insert telephone/fax numbers, incl. country/city area codes]* *[insert e-mail address, if available]*			

Similar Contract No. *[insert number]* of *[insert number of similar contracts required]*	**Information**
Description of the similarity in accordance with Sub-Criterion 4.2 of Section III:	
1. Physical size of required works items	*[insert physical size of items]*
2. Complexity	*[insert description of complexity]*
3. Methods/Technology	*[insert specific aspects of the methods/technology involved in the contract]*
4. 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[21] (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, month, year, i.e., 15 June 2015]*			
Completion date	*[insert day, month, year, i.e., 03 October 2017]*			
Role in Contract *[check the appropriate box]*	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Sub-contractor ☐
Total Contract Amount	*[insert total contract amount in contract currency(ies)]*		USD *[insert exchange rate and total contract amount in USD equivalent]*	
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]*	Total quantity in the contract (i)	Percentage participation (ii)		Actual Quantity Performed (i) x (ii)
Year 1				
Year 2				
Year 3				
Year 4				
Employer's Name:	*[insert full name]*			

[21] If applicable

	Information
Address: Telephone/fax number E-mail:	*[indicate street / number / town or city / country]* *[insert telephone/fax numbers, including country and city area codes]* *[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

It is mandatory for Bidders to be in possession of all certificates as defined in Section III. Qualification and Evaluation, Criterion No. 5.1. The following table shall be filled in by the bidder for each certification required.

Bidder's Legal Name: _____ Date: _____

Bidder's JV Member name: _____ 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.]*	**Information**			
Contract Identification	*[insert contract name and number, if applicable]*			
Award date	*[insert day, month, year, i.e., 15 June 2015]*			
Completion date	*[insert day, month, year, i.e., 03 October 2017]*			
Role in Contract *[check the appropriate box]*	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Sub-contractor ☐
Total Contract Amount	*[insert total contract amount in local currency]*		USD *[insert Exchange rate and total contract amount in USD equivalent]*	
If member in a JV or subcontractor, specify participation in total Contract amount	*[insert a percentage amount]*	*[insert total contract amount in local currency]*	*[insert exchange rate and total contract amount in USD equivalent]*	
Employer's Name:	*[insert full name]*			
Address: Telephone/fax number E-mail:	*[indicate street / number / town or city / country]* *[insert telephone/fax numbers, incl. country/city area codes]* *[insert e-mail address, if available]*			

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 implementation, including indication of scales/size by reference, if applicable project E&S categorization as per development bank categorization]*
[insert brief description or, if applicable, short abstract of the documentation annexed]	
2. ESHS measures implemented	*[description of measures implemented, incl. supporting documentation, if available]*
[insert brief description or, if applicable, short abstract of the documentation annexed]	
3. ESHS knowhow transfer to local staff, local partners and subcontractors	*[description of know how transfer and capacity building measures implemented, incl. supporting documentation, if available]*
[insert brief description or, if applicable, 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 ❸ ***
1	- the existence of an Environmental Policy	*__[Provide relevant details of the Corporate Values or similar policy documents and declarations]__*	❶ ❷
[insert brief description or, if applicable, short abstract of the documentation annexed]			
2	- the existence of an Environmental Management System, incl. an adequate organizational set-up for definition, enforcement and monitoring.	*__[Provide details of the organizational set-up and procedures for relevant issues within your company, for qualification details of relevant key staff see Form PER-5.7]__*	❷ ❸
[insert brief description or, if applicable, short abstract of the documentation annexed]			
3	- that all members of a JV, suppliers, subcontractors and temporary workforce a) are aware of and b) comply with the Environmental Management System.	*__[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.]__*	❷ ❸
[insert brief description or, if applicable, short abstract of the documentation annexed]			
4	- that regular monitoring and reviews of the status of the Environmental Management System takes place.	*__[Provide details or samples of risk assessments, reviews, audits or reports which are carried out on a regular basis for the last three years]__*	❸
[insert brief description or, if applicable, short abstract of the documentation annexed]			
5	- that procedures exist to respond to and mitigate	*__ [Provide supporting evidence like emergency manuals (index*	❸

	The Bidder shall demonstrate:	Information and Documentation	ESHS level ❸ *
	environmental emergencies and other adverse impacts on work sites.	*only), emergency procedures, etc.]__*	

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

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)

[*]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).

the ESHS level has the following meaning:
Level ❶ 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 ❷ elevated = relevant to contracts with elevated ESHS requirements in addition to ❶
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 ❸ high = relevant to contracts with high ESHS requirements in addition to ❷
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 ❸ ESHS requirements. However, each individual requirement is marked according to the level on which this requirement applies. For contracts with lower requirements (level ❶ or level ❷) those requirements which are not applicable should be deleted.]

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]*

	The Bidder shall demonstrate:	**Information**	**ESHS level** ❸
1	- the existence of an Occupational Health & Safety Policy	*__[Provide a policy document and the index of the Occupational Health & Safety manual or other relevant documents and declarations]__*	❶ ❷
[insert brief description or, if applicable, short abstract of the documentation annexed]			
2	- the existence of management system, incl. an adequate organizational set-up for definition, enforcement and monitoring.	*__[Provide details of the organizational set-up and procedures for health and safety issues within your company, for qualification details of relevant key staff see Form PER-5.7]__*	❷
[insert brief description or, if applicable, short abstract of the documentation annexed]			
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]__*	❸
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.]__*	❸
[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: 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** ❸
1	- a comprehensive strategy for staff and labor incl. recruitment of temporary workforce and local labor, worker grievance mechanism, etc.	*_[Provide information and relevant documents, if any]__*	❶ ❷ ❸
[insert brief description or, if applicable, short abstract of the documentation annexed]			
2	a comprehensive strategy for ensuring public health and safety, including programs and procedures to combat the spread of communicable diseases (incl. HIV/AIDS).	*__[Please provide supporting evidence*	❶ ❷ ❸
[insert brief description or, if applicable, short abstract of the documentation annexed]			
3	- a comprehensive strategy for staff accommodation, e.g. worksite camps, house rental, security, etc.	*__[Provide information and relevant documents, if any]__*	❷ ❸
[insert brief description or, if applicable, short abstract of the documentation annexed]			
4	- a comprehensive training strategy for transfer of ESHS knowhow to temporary workforce and subcontractors	*_[Provide information and relevant documents, if any]__*	❷ ❸

	The Bidder shall demonstrate:	**Documentation**	**ESHS level ❸**
[insert brief description or, if applicable, short abstract of the documentation annexed]			
5	- a strategy for communication and interaction with stake-holders 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.]__*	❸
[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 ❸**
1	- that ILO core labor standards[22] are fully respected in business operations by explicitly ticking the boxes.	Our business operations respect the core labor standards on: ☐ Freedom of Association ☐ Elimination of Forced Labour ☐ Non-Discrimination ☐ Abolishment of Child Labour	Pass/ fail
[insert brief description or, if applicable, short abstract of the documentation annexed]			
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, bid-rigging, unfair competition, insider rules, confidentiality, money-laundering, etc.)]__*	❷
[insert brief description or, if applicable, short abstract of the documentation annexed]			
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]__*	❷
[insert brief description or, if applicable, short abstract of the documentation annexed]			

[22] 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 ❸**
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.]__*	❷
[insert brief description or, if applicable, short abstract of the documentation annexed]			
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, whistleblower scheme, website, etc.)]__*	❸
insert brief description or, if applicable, short abstract of the documentation annexed]			

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 accordance with Section VII, Scope of Works		Education/ Degree	Years of Professional Experience	Relationship with / Years within the Bidder[23]	Country/ Regional Experience	Relevant Project References (Description of project-related experience)	Languages
	Environmental and Social, Health and Safety (ESHS) Manager			15				English
	Construction Site HSE Manager			7				Nepalese and English
	Social and Environmental Expert			7				Nepalese and English

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

[23] 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.

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).

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.

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.

Social and Environmental Expert
Contractor's Social and Environmental 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.

Moreover, Contractor's Social and Environmental Expert shall supervise the implementation of overall environmental and social mitigation activities defined by the site-specific HSEMP, provide environmental and social administrative support for the Construction HSE Manager, coordinate and maintain the preparation of environmental and social plans, procedures, work instructions etc., to be defined also for the management of emergency cases; manage and audit the personnel, ensuring they have been inducted to adequate training measures; establish an inspection / audit scheme and review the results of inspections / audits; and identify any issues and deficiencies, to be brought to the attention of Contractor's Project Manager.

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, biodiversity, prevention of erosion and wastewater management
(e) Access roads, traffic, noise and atmospheric emissions management, land take
(f) Waste and hazardous products management
(g) Vegetation clearing and site rehabilitation
(h) Relations with stakeholders, information and consultation of local communities and authorities

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, with sufficient details 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 startup 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/ Engineer's objectives, obtain required documents, 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.

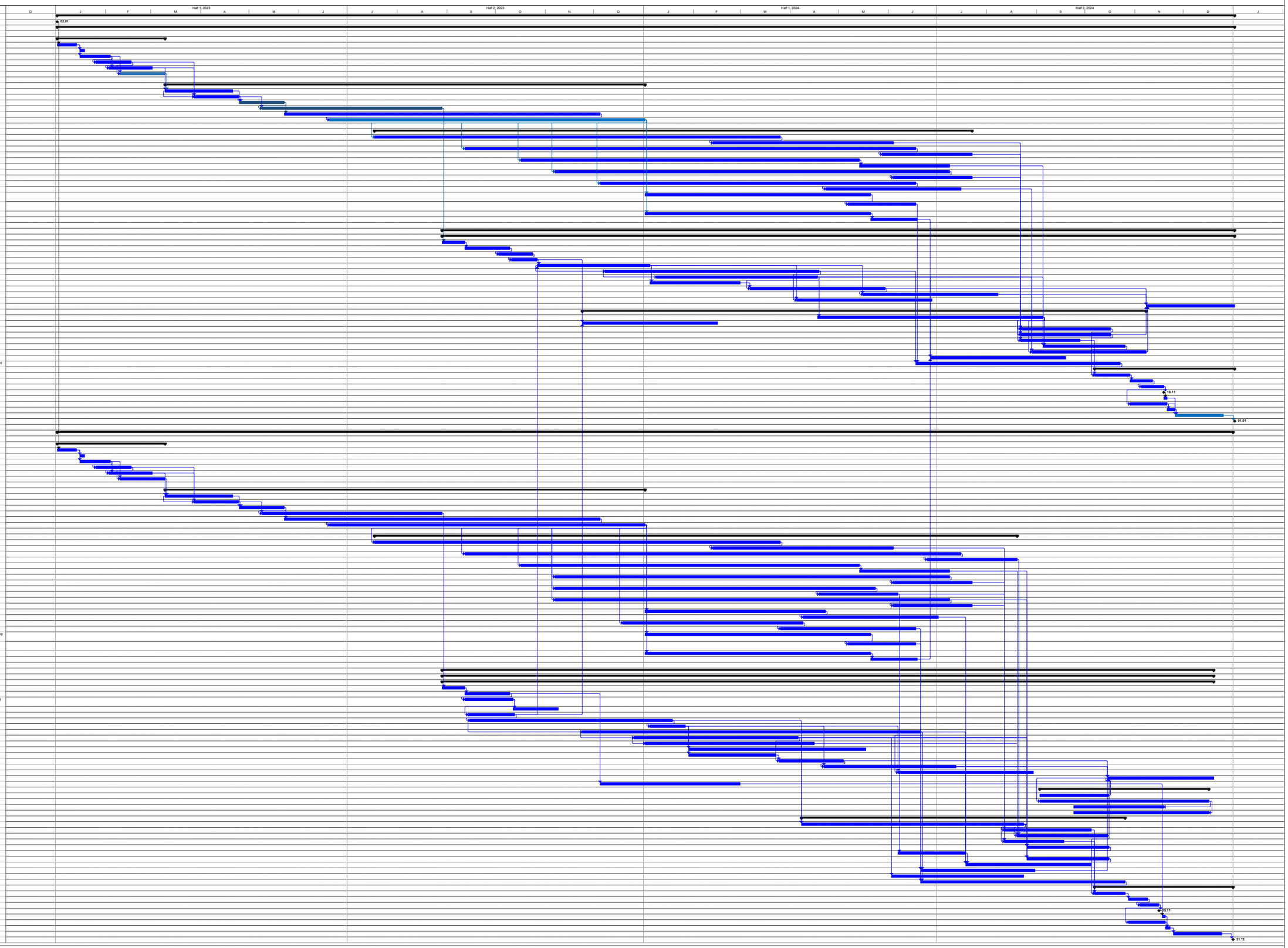
(d) The Time Schedule shall clearly state the completion date for this project, time for review, approval and consent required from parties. Potential parallel work on various parts of the Works should be clearly visible. The foreseen sequence of works, e.g. considering time for approval of design by 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 A Contractor shall be duly considered in Time Schedule to limit outages times as much as possible.

(g) 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).

ID	Task Name	D
1	**Package B Substations**	
2	Commencement date	
3	**Implemetation Works in Lekhnath substation**	
4		
5	**Preliminary Stage**	
6	Project Mobilization	
7	Kick-off meeting	
8	Basic Project Documentation	
9	Topographical Survey	
10	Geotechnical Investigation	
11	Basic Project Documentation approval by Employer	
12		
13	**Engineering**	
14	Substation basic design	
15	Civil Design including Foundation Design	
16	Comments/approval substation basic design	
17	Obtaining of work permit	
18	Detailed design by Contractor	
19	Detailed Design Approval	
20		
21	**Procurement**	
22	Design & Manufacturing of 220kV GIS electrical/mechanical equipment	
23	Packing & shipment of 220kV GIS electrical/mechanical equipment	
24	Design & Manufacturing of Autotransformers 220/132kV	
25	Packing & shipment of Autotransfomers 220/132kV	
26	Design & Manufacturing of 132kV AIS electrical/mechanical equipment	
27	Packing & shipment of 132kV AIS electrical/mechanical equipment	
28	Design & Manufacturing of aux transformer and diesel generator	
29	Packing & shipment of aux transformer and diesel generator	
30	Design & Manufacturing of 33kV electrical/mechanical equipments	
31	Packing & shipment of 33kV electrical/mechanical equipments	
32	Design & Manufacturing of P&C, SCMS, Auxiliaries, CCTV, Telecom and Metering equipments	
33	Packing & shipment of P&C, SCMS, Auxiliaries, CCTV, Telecom and Metering equipments	
34	Design & Manufacturing of Firefighting and Water Treatment systems	
35	Packing & Manufacturing of Firefighting and Water Treatment systems	
36		
37	**Erection works**	
38	**Civil works**	
39	Mobilisation on site	
40	Preparation works	
41	Removal and disposal of the existing storage building	
42	Earth works/Levelling	
43	Temporary Fences	
44	220kV GIS Control Building	
45	Foundations and cable trenches	
46	Internal and external drainage systems	
47	Extension of earthing grid	
48	Extension Internal roads	
49	Contruction of a Storage Shelter	
50	Landscaping/ final works / Fences	
51	**Electromechanical works**	
52	Erection of steel supports & gantries	
53	Erection of one 132kV Tower by the Contractor of Package A (OHL)	
54	Installation 220kV equipment	
55	Installation of autotransformers	
56	Installation of 132kV equipment	
57	Installation of aux transformer and diesel generator	
58	Installation of 33kV equipment	
59	Installation of Firefighting and Water Treatment Plant	
60	Installation of P&C, SCMS, Auxiliaries, CCTV and telecom. Equipment	
61	**Commissioning**	
62	Erection checks	
63	Internal commissioning	
64	Commissioning with Employer and Engineer	
65	Notification by contractor 220kV bays for OHL commissioning	
66	OHL Lekhnath-Damauli - Interface with OHL Package A	
67	Integration in the NLDC/ECC of the new SCMS of Lekhnath	
68	Point to Point and Teleprotection Tests	
69	Trial Operation	
70	Ready for Taking over	
71		
72	**Implemetation Works in Damauli substation**	
73		
74	**Preliminary Stage**	
75	Project Mobilization	
76	Kick-off meeting	
77	Basic Project Documentation	
78	Topographical Survey	
79	Geotechnical Investigation	
80	Basic Project Documentation approval by Employer	
81		
82	**Engineering**	
83	Substation basic design	
84	Civil Design including Foundation Design	
85	Comments/approval substation basic design	
86	Obtaining of work permit	
87	Detailed design by the Contractor	
88	Detailed Design Approval	
89		
90	**Procurement**	
91	Design & Manufacturing of 220kV GIS electrical/mechanical equipment	
92	Packing & shipment of 220kV GIS electrical/mechanical equipment	
93	Design & Manufacturing of Power Transformers 220/132kV	
94	Packing & shipment of Power Transformers 220/132kV	
95	Design & Manufacturing of 132kV GIS electrical/mechanical equipment	
96	Packing & shipment of 132kV GIS electrical/mechanical equipment	
97	Design & Manufacturing of 132/33kV power transformer	
98	Packing & shipment of of 132/33kV power transformer	
99	Design & Manufacturing of 33/11kV power transformer	
100	Packing & shipment of of 33/11kV power transformer	
101	Design & Manufacturing of aux transformer and diesel generator	
102	Packing & shipment of aux transformer and diesel generator	
103	Design & Manufacturing of 33kV electrical/mechanical equipments	
104	Packing & shipment of 33kV electrical/mechanical equipments	
105	Design & Manufacturing of 11kV electrical/mechanical equipments	
106	Packing & shipment of 11kV electrical/mechanical equipments	
107	Design & Manufacturing of P&C, Auxiliaries, CCTV, Telecom and Metering equipments	
108	Packing & shipment of P&C, Auxiliaries, CCTV, Telecom and Metering equipments	
109	Design & Manufacturing of Firefighting and Water Treatment systems	
110	Packing & Manufacturing of Firefighting and Water Treatment systems	
111		
112	**Erection works**	
113	**Civil works**	
114	**Phase 1**	
115	Mobilisation on site	
116	Preparation works	
117	Construction of Temporary Bridge and enhancement of the existing acces road	
118	Removal and Disposal of the existing building	
119	Soil improvement, Earth works, compaction and Levelling	
120	Development of the 220kV substation platform	
121	Temporary Fences for Substation	
122	220kV and 132kV GIS Control Buildings	
123	Foundations and cable trenches	
124	Transformer Foundations	
125	Construction of Permanent Access Road	
126	Internal and external drainage systems	
127	Earthing grid	
128	Internal roads	
129	Gate Building	
130	Landscaping/ final works / permanent fences	
131	Contruction of Terminal Towers by the Contractor of Package A	
132	**Phase 2**	
133	Removal and Disposal of Temporary Bridge (if required)	
134	Construction of flood retaining wall towards Chabdi River	
135	Levelling of area between 220kV platform and riverbed	
136	Landscaping/ final works / Fences	
137	**Electromechanical works**	
138	Erection of steel supports & gantries	
139	Installation 220kV equipment	
140	Installation of 220/132kV power transformers	
141	Installation of 132kV equipment	
142	Installation of 132/33kV power transformer	
143	Installation of 33/11kV power transformer	
144	Installation of Aux transformer and diesel generator	
145	Installation of 33kV equipment	
146	Installation of 11kV equipment	
147	Installation of Firefighting and Water Treatment Plant	
148	Installation of P&C, Auxiliaries, CCTV and Telecom. Equipment	
149	**Commissioning**	
150	Erection checks	
151	Internal commissioning	
152	Commissioning with Employer and Engineer	
153	Notification by contractor 220kV bays for OHL commissioning	
154	OHL Lekhnath-Damauli - Interface with OHL Package A	
155	Integration in the NLDC/ECC of the new SCMS of Damauli	
156	Point to Point and Teleprotection Tests	
157	Trial Operation	
158	Ready for Taking over	



Project: Annex D7-2
Date: Fri 24.06.22

Task | Milestone | Project Summary | External Milestone | Inactive Summary | Duration-only | Manual Summary | Finish-only | External Milestone | Deadline
Split | Summary | External Tasks | Inactive Milestone | Manual Task | Manual Summary Rollup | Start-only | External Tasks | Progress

Plant & Conformity of Facilities

Instructions on preparation and submission of Plant & Conformity of Facilities

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 will 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:

1. **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 2, Section VII, Sub-Section VII-8. Technical Data Sheets), reference lists, end-user certificates, drawings, up-to-date brochures and catalogues, type test reports (as per the requirements of Part 2, Section VII, Sub-Section VII-3 Technical Requirements- Substation) etc.

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

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

2. **Preliminary Drawings** of the facilities to be provided, including single line diagrams, preliminary layout of the main primary & secondary equipment, substation layouts, SCMS layout drawings, protection concept drawings etc.

3. **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 Employer's Requirements.

Conformity of the Facilities Requirements

Item	Description of Component	Filled-in Technical Data Sheets	Reference lists**	End-user certificates***	Type test certificates****	Drawings	Brochures/ catalogues	Additional requirements
1	**Outdoor Switchyard Equipment***							
1.1	Circuit breakers	x	x	x	x	x	x	-
1.2	Disconnectors & earthing switches	x	x	x	x	x	x	-
1.3	Current transformers	x	x	x	x	x	x	-
1.4	Voltage transformers	x	x	x	x	x	x	-
1.5	Surge arresters	x	x	x	x	x	x	-
	GIS Equipment******	x	x	x	x	x	x	
2	**Steel Structures, Busbars, Connections and Insulators**							
2.1	Steel structure supports, gantries	x	x	x	x	-	x	-
2.2	Post insulators	x	x	x	x	x	x	-
3	**Transformers*****							
3.1	Autotransformer	x	x	x	x^1	x^2	x^3	x^4
3.2	Power Transformer	x	x	x	x^1	x^2	x^3	x^4
3.3	Auxiliary transformers	x	x	x	x	x^2	x	-
4	**MV Switchgear**	x	x	x	x	x	x	-

Item	Description of Component	Filled-in Technical Data Sheets	Reference lists**	End-user certificates***	Type test certificates****	Drawings	Brochures/ catalogues	Additional requirements
6	**Control and Protection Equipment*******	x	x	x	x	x[5]	x	-
7	**SCMS/SCADA*******	x	x	x	x	x[7]	x	x[8]
8	**Telecommunication System*******	x	x	x	x	x[5]	x	-
9	**Power & Control Cables**							
9.1	MV cables	x	x	x	x	-	x	-
9.2	LV cables	x	x	x	-	-	x	-
10	**Metering Equipment**	x	x	x	x	-	x	x[6]
11	**Fire Detection and Alarm System**	x	x	x	-	-	x	x[6]
12	**Civil Works**	-	X[9]	x	-	-	x	-

Item	Description of Component	Filled-in Technical Data Sheets	Reference lists**	End-user certificates***	Type test certificates****	Drawings	Brochures/ catalogues	Additional requirements
13	**Erection and Installation Works**	-	X[10]	x	-	-	x	-
14	**Testing and Commissioning Works**	-	x	x	-	-	x	-

Legend

x : The Bidder shall submit the required documentary evidence.
- : The Bidder is not required to submit any documentation in this regard.
* : The requirements apply to all voltage levels (220 kV etc., as applicable). Separate documentary evidence per voltage level shall be submitted.
** : The reference lists shall refer to at least 10 years.
*** : The Bidder shall submit each manufacturer certificates from at least **one (1)** end-user having purchased equipment similar to the offered one, manufactured throughout the last 10 years.
**** : The type test certificates shall not be older than 10 years and shall be issued from an independent institute.
***** : The term "transformers" regards all power transformers, autotransformers, auxiliary transformers, shunt reactors, current limiting reactors etc., as applicable.
******: GIS manufacturer experience in foreign countries shall be more than 15 years. Evidence shall be provided.
*******: Protection & Control and Telecommunication Equipment manufacturer experience in foreign countries shall be more than 15 years. Evidence shall be provided.

Notes

1: Type test certificates of similar transformers

In case the Bidder/Contractor decides to demonstrate the ability to withstand the dynamic effects of short circuit by calculation (IEC 60076 -5, subclause 4.2), the Bidder/Contractor shall submit a proof that the sourcing transformer factory has already successfully demonstrated the ability to withstand the dynamic effects of short circuit by test for at least two similar transformers (in terms of Voltage and Rating). This proof shall be submitted together with the Technical Bid.

2: Outline drawings of the offered transformers showing general constructional features with details of materials

3: Catalogues of the standard equipment used for tap changer, on-line condition monitoring system (if applicable), motors, pumps, valves etc.

4: - Detailed information on properties of materials used for the core and the winding assembly
- Information on heavy components handling for transportation and erection (sketch with indication of special tools and devices needed)
- No-load and short-circuit curves: typical diagrams for similar as-built equipment
- Preliminary "List of alarms" for the transformer with cooling system presenting operation of each alarm (warning, tripping, etc.)
- List of proposed manufacturers providing major instruments, apparatus, and other functionally important items

5: General arrangement drawing

6: A brief description of the intended system/equipment to be provided.

7: Block and functional diagram showing the proposed control, protection and monitoring schemes.

8: - description of the system
- digital control and monitoring system layout
- material list of equipment contained in the cubicles
- certificate of conformity with communication protocol IEC 61850, for each component type
- detailed explanation on how continuous operation -without any down time- is to be ensured in the event of loss of one of the redundant equipment, such as server, operator station or database.

9: References (Completion Certificates provided by Contractor, Employer) for Civil Works in minimum 2 (two) substation projects (220 kV or more) during the last 10 (ten) years”.

10: References (Completion Certificates provided by Contractor, Employer) for Erection and Installation Works in minimum two (2) substation projects (220 kV or more) during the last 10 (ten) years”.

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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 equipment		
Equipment information	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
Current status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment ☐ Owned ☐ Rented ☐ Leased ☐ Specially manufactured	

Omit the following information for equipment owned by the Bidder.

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 [months]	Experience [years]	CV provided [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

*As listed in Section III.

Form PER-2 -
Resume of Proposed Personnel

Name of Bidder

Position		
Personnel information	**Name**	**Date of birth**
	Professional qualifications	
Present employment	**Name of employer**	
	Address of employer	
	Telephone	**Contact (manager / 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	To	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.	**Substation 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, will be considered as nil and void 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**

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

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.

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 .

Price Adjustment shall apply for the Power Transformer only in accordance with the stipulations mentioned below.

5. Bid prices shall be quoted in the manner indicated and, in the currencies, 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 price of the optional items shall be also provided by the bidders as requested in the Price Schedules. 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 should the Employer decide to make use of this list or part thereof. With regard to the recommended spare parts, 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 Power Transformer and Autotransformers[24]

Only Applicable to Price Schedule I

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 formula:

$$P_n = P_0 \times \left(a + b\frac{Fe}{Fe_0} + c\frac{Cu}{Cu_0} + d\frac{Fei}{Fei_0}\right) - P_0$$

in which:

P_n = *adjustment amount payable to the Contractor*

P_0 = *Contract price (base price)*

a = *percentage of fixed element in Contract price (a = 35%)*

b = *percentage of core steel component in Contract price (c =25%)*

c = *percentage of copper component in Contract price (d = 25%)*

d = *percentage of construction steel in Contract price (f = 15%)*

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

M_{CU0}, M_{CU1} = International Copper Price Index on the base date and the date for adjustment, respectively

M_{Fei0}, M_{Fei1} = International Construction Steel Price Index on the base date and the date for adjustment, respectively

[24] The price adjustment clause is applicable to Autotransformers and Power Transformers.

Conditions Applicable to Price Adjustment
The Bidder shall indicate the base date indices in its bid.

Item	Source of Indices Used	Base Date Indices
Power Transformer:		
Core steel:	London Metal Exchange CFR India (official rate)	
Construction steel:	London Metal Exchange CFR India (official rate)	
Copper:	London Metal Exchange cash (official rate)	

The base date shall be the date thirty (21) days prior to the Bid closing date.

The date of adjustment shall be the mid-point (180 days) of the period of manufacture of the power transformers.

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_0, is expressed is different from the currency of the country of origin of the 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. The currency can be converted into the relevant currency at the selling rate established by the currency's central bank.

(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

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
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
1	**220kV Extension of the 132kV switchyard in Lekhnath**					
1.1	**Extension of existing 132kV Switchyard**					
1.1.1	**132kV Transformer Bays (E13, E14)**					
1.1.1.1	Set of 3-pole circuit breaker		set	2		
1.1.1.2	Sets of 3-pole disconnector with earthing switch		set	4		
1.1.1.3	Set of 3-pole pantograph disconnector		set	2		
1.1.1.4	1-pole current transformer		nos	6		
1.1.1.5	1-pole voltage transformer		nos	6		
1.1.1.6	Gantries for busbar and feeders		lot	1		
1.1.1.7	Busbar and feeder conductors		lot	1		
1.1.1.8	Insulators and fittings		lot	1		
1.1.1.9	All other necessary equipment and materials to complete the supply and the installation		lot	1		
1.1.2	**Transformer AIS equipment and auxiliary system for fast reconnection of the spare transformer unit**					
1.1.2.1	Surge arresters for the 220 kV transformer side		nos	7		
1.1.2.2	Surge arresters for the 132 kV transformer side		nos	7		
1.1.2.3	Surge arresters for the tertiary (11 kV) side		nos	7		
1.1.2.4	Gantries for 220 kV and 132 kV auxiliary busbar		lot	1		
1.1.2.5	OHL conductors for 220 kV and 132 kV auxiliary busbar for fast reconnection of the spare transformer unit		lot	1		
1.1.2.6	220 kV insulators and fittings		lot	1		
1.1.2.7	132 kV insulators and fittings		lot	1		
1.1.2.8	Materials for the interconnection of the auto-transformers tertiaries with the new 33 kV switchgear by means of busbar and cable including facility for fast reconnection of spare transformer		lot	1		
1.1.2.9	All other necessary equipment and materials to complete the supply and the installation		lot	1		
1.1.3	**Additional extension and relocation works**					
1.1.3.1	All necessary equipment and materials for relocation of existing lighting poles affected by the extension of the 132 kV switchyard		lot	1		
1.1.3.2	All necessary equipment and materials for relocation of two (2) existing lightning protection masts affected by the extension of the 132 kV switchyard		lot	1		
1.1.3.3	All necessary equipment and materials for relocation, within the substation's property, of an out-of-service transformer currently located in front of bay E14		lot	1		
1.2	**220/132/33kV Autotransformer**					
1.2.1	Single-phase autotransformers 220/132/33 kV 100 MVA/phase, equipped with on-load tap changer		nos	7		
1.2.2	Automatic voltage regulator, including the relevant software and integration in the SCMS		set	2		
1.2.3	Online transformer condition monitoring system, including the relevant software and integration in the SCMS		set	7		
1.2.4	All other necessary equipment and materials to complete the supply and the installation		lot	1		
1.3	**220 kV Gas Insulated Switchgear**					
1.3.1	Transformer bay (D03, D07) with GIB and SF6/air bushings		set	2		
1.3.2	Local control panel with bay cabling for feeder D03, D07		set	2		
1.3.3	OHL Bay (D04, D06) with GIB and SF6/air bushings		set	2		
1.3.4	Local control panel with bay cabling for feeder D04, D06		set	2		
1.3.5	Measuring Bay (D05)		set	1		
1.3.6	Bus Coupler Bay D05		set	1		
1.3.7	Local control panel with bay cabling for feeder D05 and (D05), including cable connections to bus bar measuring and bus bar earthing		set	1		
1.3.8	Sensors for partial discharge measurement		lot	1		
1.3.9	Provision (light sensor) for future arc detection		lot	1		
1.3.10	GIS steel supports for all bays and for GIB's, including wall bushings (material from GIS manufacturer for closing the wall openings)		lot	1		
1.3.11	Wall boards as specified (typical bay sections, single line diagram and gas compartment plan, gas density rules, gas temperature pressure curves etc.)		lot	1		

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
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
1.3.12	Key box including specified labelled keys and pad locks for 220kV GIS		lot	1		
1.3.13	All other necessary equipment and materials to complete the supply and the installation		lot	1		
1.4	**220 kV AIS Equipment**					
1.4.1	220kV OHL surge arresters		nos	6		
1.4.2	220kV capacitive voltage transformers		unit	6		
1.4.3	220 kV OHL gantry		lot	1		
1.4.4	220 kV insulators and fittings		lot	1		
1.4.5	All other necessary equipment and materials to complete the supply and the installation		lot	1		
1.5	**33 kV Switchgear**					
1.5.1	Outgoing feeder to auxiliary transformer (K02, K04)		set	2		
1.5.2	Riser measurement panel (K01, K03)		set	2		
1.5.3	All other necessary equipment, accessories and materials to complete the supply and the installation		lot	1		
1.6	**Zig Zag Earthing Auxiliary Transformers**					
1.6.1	Three-phase zig zag auxiliary transformers 33/0.4 kV, hermetically sealed type with off load tap changer, each of minimum 630 kVA		nos	2		
1.6.2	Tank mounted surge arresters for the primary (33 kV) side.		unit	6		
1.6.3	All other necessary equipment and materials to complete the supply and the installation		lot	1		
1.7	**LV Auxiliary Power Supply System**					
1.7.1	0.4 kV main switchgear, metal-clad type		set	1		
1.7.2	220 V DC switchgear with two bus sections		set	1		
1.7.3	220 V battery chargers		set	2		
1.7.4	220 V DC batteries of Ni-Cd type, each with a minimum capacity of 600 Ah (10h discharge rate)		set	2		
1.7.5	48 V DC switchgear with two bus sections		set	1		
1.7.6	48 V battery chargers		set	2		
1.7.7	48 V DC batteries of Ni-Cd type, each with a minimum capacity of 150 Ah		set	2		
1.7.8	230 V AC UPS System		set	2		
1.7.9	All other necessary equipment and materials to complete the supply and the installation		lot	1		
1.8	**Diesel generator unit (DGU)**					
1.8.1	Diesel generator unit, minimum of 50 kVA, in a prefabricated container equipped with fire-detection system and exhaust gas evacuation system including fuel tank		set	1		
1.8.2	All other necessary equipment and materials to complete the supply and the installation		lot	1		
1.9	**Protection & Control**					
1.9.1	220 kV OHL Protection Terminals and BCU (D04, D06)		set	2		
1.9.2	220kV Bus coupler (D05) and Busbar Protections and BCU		set	1		
1.9.3	300MVA 220 kV side autotransformer protection and BCU (D03, D07)		set	2		
1.9.4	300MVA 132kV side autotransformer protection and BCU (E13, E14)		set	2		
1.9.5	20MVA 33kV side autotransformer bay control and protection BCPU (K01, K03) (installed in MV Switchgear)		set	2		
1.9.6	Auxiliary Earthing Tansformer bay control and protection BCPU (K02, K04) (installed in MV Switchgear)		set	2		
1.9.7	Marshalling panel for the transformer control circuits for fast reconnection of spare transformer		set	2		
1.9.8	All other necessary equipment and materials to complete the supply and the installation		lot	1		

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
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
1.10	**Synchrophasor Measurement Unit (PMU)** for monitoring voltage and current as defined in the Scope, including software, documentation, cubicles, accessories		lot	1		
1.11	**SCADA and SCMS**					
1.11.1	SCADA and SCMS system for new 220/132/33/11 kV Substation including all necessary cabling, cubicles, desks, chairs, equipment and materials to complete the supply and the installation, The Contractor shall ensure that after handing over, a minimum of 50% spare function capacity (hardware and software, number of I/O to be handled by the SCMS)		set	1		
1.11.2	Equipment and material for interfacing with NLDC/ECC including all necessary cabling, cubicles, equipment and materials to complete the supply and the installation		set	1		
1.11.3	Equipment and material for interfacing with Existing Lekhnath 132 kV Substation including all necessary cabling, cubicles, equipment and materials to complete the supply and the installation		set	1		
1.12	**Telecommunication**					
1.12.1	SDH Equipment SDH node for FOC connections to the new 220/132/33/11kV GIS Damauli Substation and to the existing 132/33/11kV Lekhnath Substation		lot	1		
1.12.2	Fibre optical cables and patch cords		lot	1		
1.12.3	Optical Distribution Frame and accessories		lot	1		
1.12.4	IP-PBX telephony system, including appropriate telephone sets		lot	1		
1.12.5	All other necessary cubicles, software, equipment and materials to complete the supply and the installation		lot	1		
1.13	**Metering**					
1.13.1	Meter for 220kV OHL Main & Control		set	2		
1.13.2	Meter for 220/132/33 kV autotransformers (220 kV side and 132 kV side) Main & Control		set	4		
1.13.3	Meter for auxiliary transformers Main & Control		set	4		
1.13.4	Communication equipment (Ethernet Switches / Patch Panels / FOs / Cables etc..)		lot	1		
1.13.5	GPRS-GSM communication device		set	1		
1.13.6	Cabinet		lot	1		
1.13.7	Notebook PC including related software for local access for meter reading		set	1		
1.13.8	All other necessary, software, equipment and materials to complete the supply and the installation		lot	1		
1.14	**Power and Control Cables**					
1.14.1	33 kV Cables, sealing ends, terminals and accessories for33kV auxiliary system including accessories		lot	1		
1.14.2	LV Power and Control cables and accessories for auxiliary supply, protection, control, metering, fire protection, including accessories		lot	1		
1.14.3	All other necessary equipment and materials to complete the supply and the installation		lot	1		
1.15	**Earthing and lightning protection systems**		lot	1		
1.16	**Lighting and small power system**		lot	1		
1.17	**Fire Protection system**					
1.17.1	Fire detection system		lot	1		
1.17.2	Portable fire extinguishers		lot	1		
1.17.3	**Fire fighting system**					
1.17.3.1	Containerised fire fighting pump system		lot	1		
1.17.3.2	Fire fighting water tank		lot	1		
1.17.3.3	Fire fighting water supply pump with well		lot	1		
1.17.3.4	Transformer deluge systems for power transformers		set	7		
1.17.3.5	Fire hydrant network and interconnection piping		lot	1		
1.17.3.6	All accessories necessary for the satisfactory operation of the system but which are not separately listed		lot	1		

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
Schedule No. I: Plant, and Mandatory Spare Parts Supplied from Abroad						
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		(Country of origin)			**CIP**	**CIP**
					(USD)	**(USD)**
				1	2	3=1x2
1.18	**CCTV system**					
1.18.1	Central unit		set	1		
1.18.2	Control panel		set	1		
1.18.3	Monitor		set	2		
1.18.4	Indoor Camera		lot	1		
1.18.5	Outdoor Camera		lot	1		
1.18.6	All other necessary equipment and materials to complete the extension		lot	1		
2	**Construction of 220/132/33/11 kV substation in Damauli**					
2.1	**220 kV Gas Insulated Switchgear**					
2.1.1	OHL Bays with GIB and SF6/air bushings (D06, D07, D08, D13, D14, D15)		set	6		
2.1.2	Local control panel with bay cabling for feeder (D06, D07, D08, D13, D14, D15)		set	6		
2.1.3	220/132kV Transformer Bay with GIB and SF6/air bushings (D09 and D12)		set	2		
2.1.4	Local control panel with bay cabling for feeder (D09 and D12)		set	2		
2.1.5	Bus Coupler Bays (D05, D16)		set	2		
2.1.6	Local control panel with bay cabling for feeder (D05, D16)		set	2		
2.1.7	Measuring Bays ((D10) and (D11))		set	2		
2.1.8	Busbar Sectionalizers (D10, D11)		set	2		
2.1.9	Local control panel with bay cabling for feeder D10 and D11, including cable connections to bus bar measuring and bus bar earthing		set	2		
2.1.10	Sensors for partial discharge measurement		lot	1		
2.1.11	Provision (light sensor) for future arc detection		lot	1		
2.1.12	GIS steel supports for all bays and for GIB's, including wall bushings (material from GIS manufacturer for closing the wall openings)		lot	1		
2.1.13	Wall boards as specified (typical bay sections, single line diagram and gas compartment plan, gas density rules, gas temperature pressure curves etc.)		lot	1		
2.1.14	Key box including specified labelled keys and pad locks for 220kV GIS		lot	1		
2.1.15	All other necessary equipment and materials to complete the supply and the installation		lot	1		
2.2	**220 kV AIS Equipment**					
2.2.1	220kV OHL surge arresters		nos	18		
2.2.2	220kV capacitive voltage transformers		nos	18		
2.2.3	220 kV OHL gantry		lot	1		
2.2.4	220 kV insulators and fittings		lot	1		
2.2.5	All other necessary equipment and materials to complete the supply and the installation		lot	1		
2.3	**132 kV Gas Insulated Switchgear**					
2.3.1	220/132kV Transformer Bays with GIB and SF6/air bushings (E02, E06)		set	2		
2.3.2	Local control panel with bay cabling for feeder E02, E06		set	2		
2.3.3	OHL Bays with GIB and SF6/air bushings (E03, E07)		set	2		
2.3.4	Local control panel with bay cabling for feeder E03, E07		set	2		
2.3.5	132/33kV Transformer Bay with cable conections (E01, E05)		set	2		
2.3.6	Local control panel with bay cabling for feeder E01, E05		set	2		
2.3.7	Measuring Bay (E04)		set	1		
2.3.8	Bus Coupler E04		set	1		
2.3.9	Local control panel with bay cabling for feeder E04 and (E04), including cable connections to bus bar measuring and bus bar earthing		set	1		
2.3.10	Sensors for partial discharge measurement		lot	1		
2.3.11	Provision (light sensor) for future arc detection		lot	1		
2.3.12	GIS steel supports for all bays and for GIB's, including wall bushings (material from GIS manufacturer for closing the wall openings)		lot	1		
2.3.13	Wall boards as specified (typical bay sections, single line diagram and gas compartment plan, gas density rules, gas temperature pressure curves etc.)		lot	1		
2.3.14	Key box including specified labelled keys and pad locks for 132kV GIS		lot	1		
2.3.15	All other necessary equipment and materials to complete the supply and the installation		lot	1		

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
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
2.4	**132 kV AIS Equipment**					
2.4.1	132 kV OHL surge arresters		nos	6		
2.4.2	132 kV capacitive voltage transformers		nos	6		
2.4.3	132 kV OHL gantry		lot	1		
2.4.4	132 kV insulators and fittings		lot	1		
2.4.5	All other necessary equipment and materials to complete the supply and the installation		lot	1		
2.5	**Power Transformers**					
2.5.1	**220/132 Power Transformer**					
2.5.1.1	Three-phase power transformer 220/132 kV 50/63 MVA, equipped with on-load tap changer		nos	2		
2.5.1.2	line surge arresters for the primary (220 kV) side		nos	6		
2.5.1.3	line surge arresters for the secondary (132 kV) side		nos	6		
2.5.1.4	automatic voltage regulator, including the relevant software and integration in the SCMS		set	2		
2.5.1.5	All other necessary equipment and materials to complete the supply and the installation		lot	1		
2.5.2	**132/33 kV Power Transformer**					
2.5.2.1	Three-phase power transformer 132/33kV 24/30 MVA, equipped with on-load tap changer		nos	2		
2.5.2.2	Line surge arresters for the secondary (132 kV) side		nos	6		
2.5.2.3	Line surge arresters for the secondary (33 kV) side		nos	6		
2.5.2.4	Automatic voltage regulator, including the relevant software and integration in the SCMS		set	2		
2.5.2.5	All other necessary equipment and materials to complete the supply and the installation		lot	1		
2.5.3	**33/11 kV Power Transformer**					
2.5.3.1	Three-phase power transformer 33/11kV 6/8 MVA, equipped with on-load tap changer		nos	2		
2.5.3.2	Line surge arresters for the secondary (33 kV) side		nos	6		
2.5.3.3	Line surge arresters for the secondary (11 kV) side		nos	6		
2.5.3.4	Automatic voltage regulator, including the relevant software and integration in the SCMS		set	2		
2.5.3.5	All other necessary equipment and materials to complete the supply and the installation		lot	1		
2.6	**MV Metal Clad AIS Switchgear**					
2.6.1	**33 kV Switchgear**					
2.6.1.1	Incomers for 132/33kV transformer connection (J02, J11)		nos	2		
2.6.1.2	Outgoing feeders (J04, J10)		nos	2		
2.6.1.3	Outgoing feeder 33/11 kV transformer (J03, J12)		nos	2		
2.6.1.4	Outgoing feeders to auxiliary transformer (J05, J09)		nos	2		
2.6.1.5	Bus tie (J07)		nos	1		
2.6.1.6	Riser measurement panel (J08)		nos	1		
2.6.1.7	Measurement panel (J06)		nos	1		
2.6.1.8	All other necessary equipment, accessories and materials to complete the supply and the installation		lot	1		
2.6.2	**11 kV Switchgear**					
2.6.2.1	Incomers for 33/11kV transformer connection (K03, K08)		nos	2		
2.6.2.2	Outgoing feeders (K04, K05, K09, K11, K12)		nos	5		
2.6.2.3	Bus tie (K07)		nos	1		
2.6.2.4	Riser measurement panel (K06)		nos	1		
2.6.2.5	Measurement panel (K10)		nos	1		
2.6.2.6	All other necessary equipment, accessories and materials to complete the supply and the installation		lot	1		
2.7	**Auxiliary Transformers**					
2.7.1	Three-phase auxiliary transformers 33/0.4 kV, hermetically sealed type with off load tap changer, each of minimum 630 kVA		nos	2		
2.7.2	Tank mounted surge arresters for the primary (33 kV) side.		nos	6		

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
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
2.7.3	All other necessary equipment and materials to complete the supply and the installation		lot	1		
2.8	**LV Auxiliary Power Supply System**					
2.8.1	0.4 kV main switchgear, metal-clad type		set	1		
2.8.2	220 V DC switchgear with two bus sections		set	1		
2.8.3	220 V battery chargers		set	2		
2.8.4	220 V DC batteries of Ni-Cd type, each with a minimum capacity of 600 Ah (10h discharge rate)		set	2		
2.8.5	48 V DC switchgear with two bus sections		set	1		
2.8.6	48 V battery chargers		set	2		
2.8.7	48 V DC batteries of Ni-Cd type, each with a minimum capacity of 150 Ah		set	2		
2.8.8	230 V AC UPS System		set	2		
2.8.9	All other necessary equipment and materials to complete the supply and the installation		lot	1		
2.9	**Diesel generator unit (DGU)**					
2.9.1	Diesel generator unit, minimum of 100 kVA, in a prefabricated container equipped with fire-detection system and exhaust gas evacuation system including fuel tank		set	1		
2.9.2	All other necessary equipment and materials to complete the supply and the installation		lot	1		
2.10	**Protection & Control**					
2.10.1	220 kV OHL Protection Terminals and BCU (D06, D07, D08, D13, D14, D15)		set	6		
2.10.2	220kV Bus-sectionaliser and Busbar protection and BCU (D10, D11)		set	2		
2.10.3	220kV Bus-coupler and Busbar protection (D05, D16)		set	2		
2.10.4	50/63 MVA 220/132 kV Transformer 220 kV side protection and BCU (D09, D12)		set	2		
2.10.5	50/63 MVA 220/132/ kV Transformer 132 kV side protection and BCU (E02, E06)		set	2		
2.10.6	132 kV OHL Protection Terminals and BCU (E03, E07)		set	2		
2.10.7	132kV Bus-coupler and Busbar protections and BCU (E04)		set	1		
2.10.8	132/33kV 24/30 MVA Transformer feeder protection 132 kV side and BCU (E01, E05)		set	2		
2.10.9	132/33kV 24/30 MVA Transformer feeder bay control and protection (BCPU) 33 kV side (J02, J09) (installed in 33 kV switchgear)		set	2		
2.10.10	33kV Bus-coupler bay control and protection (BCPU) (J07) (installed in 33 kV switchgear)		set	1		
2.10.11	33kV Feeder bay control and protection (BCPU) (J04, J08)		set	2		
2.10.12	33/11kV 8/10MVA Transformer feeder bay control and protection (BCPU) 33 kV side (J03, J10)		set	2		
2.10.13	33/11kV 8/10MVA Transformer feeder protection 11 kV side (K03, K08) (installed in 11 kV switchgear)		set	2		
2.10.14	11kV Feeder bay control and protection (BCPU) (K04, K05, K11, K12, K13, K14) (installed in 11 kV switchgear)		set	5		
2.10.15	11kV Auxiliary Transformer Feeder bay control and protection (BCPU) (K06, K10) (installed in 11 kV switchgear)		set	2		
2.10.16	11kV Bus-coupler protection (K07)		set	1		
2.10.17	All other necessary equipment and materials to complete the supply and the installation		lot	1		
2.11	**Synchrophasor Measurement Unit (PMU)** for monitoring voltage and current as defined in the Scope, including software, documentation, cubicles, accessories		set	1		

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
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
2.12	**SCADA and SCMS**					
2.12.1	SCADA and SCMS system for new 220/132/33/11 kV Substation including all necessary cabling, cubicles, desks, chairs, equipment and materials to complete the supply and the installation, The Contractor shall ensure that after handing over, a minimum of 50% spare function capacity (hardware and software, number of I/O to be handled by the SCMS)		lot	1		
2.12.2	Equipment and material for interfacing with NLDC/ECC including all necessary cabling, cubicles, equipment and materials to complete the supply and the installation		lot	1		
2.12.3	Equipment and material for interfacing with future New Damauli 400 kV Substation including all necessary cabling, cubicles, equipment and materials to complete the supply and the installation		lot	1		
2.13	**Telecommunication**					
2.13.1	SDH Equipment SDH node for FOC connections of new 220 kV GIS Lekhnath Substation, to Tanahu HPP, 220 kV Bharatpur Substation, Old Damauli and 132 kV Bharatpur.		lot	1		
2.13.2	Fibre optical cables, including approach cable from splicing box to SDH equipment and patch cords		lot	1		
2.13.3	Optical Distribution Frame and accessories		lot	1		
2.13.4	IP-PBX telephony system, including appropriate telephone sets		lot	1		
2.13.5	All other necessary cubicles, software, equipment and materials to complete the supply and the installation		lot	1		
2.14	**Metering**					
2.14.1	Meter for 220kV OHL Main & Control		set	6		
2.14.2	Meter for 132 OHL Main & Control		set	2		
2.14.3	Meter for 220/132 kV Transformers, (220 kV side and 132 kV side), Main & Control		set	4		
2.14.4	Meter for 132/33 kV Transformers, 132 kV side and 33 kV side), Main & Control		set	4		
2.14.5	Meter for 33/11 kV Transformers, (33 kV side and 11 kV side), Main & Control		set	4		
2.14.6	Meter for 33 kV Feeders Main & Control		set	2		
2.14.7	Meter for 11 kV Feeders Main & Control		set	5		
2.14.8	Meter for auxiliary transformers Main & Control		set	2		
2.14.9	Communication equipment (Ethernet Switches / Patch Panels / FOs / Cables etc..)		lot	1		
2.14.10	GPRS-GSM communication device		lot	1		
2.14.11	Cabinet		lot	1		
2.14.12	Notebook PC including related software for local access for meter reading		set	1		
2.14.13	All other necessary, software, equipment and materials to complete the supply and the installation		lot	1		
2.15	**Power and Control Cables**					
2.15.1	HV cable systems comprising 132 kV XLPE cables for the connection between the secondary windings of 220/132 kV transformers and the 132 kV switchgear		lot	1		
2.15.2	MV cable systems comprising 33 kV XLPE cables for the connection between secondary windings of 132/33 kV transformers and 33 kV switchgear		lot	1		
2.15.3	MV cable systems comprising 33 kV XLPE cables for the connection between 33 kV switchgear and 33/11 kV transformers		lot	1		
2.15.4	MV cable systems comprising 33 kV XLPE cables for the connection between 33kV switchgear and auxiliary transformers		lot	1		
2.15.5	MV cable systems comprising 11 kV XLPE cables for the connection between secondary windings of 33/11 kV transformers and 11 kV switchgear		lot	1		

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
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
2.15.6	MV cable systems comprising 11 kV XLPE cables for the connection of three 11 kV feeders between between 11 kV switchgear and distribution OHL pole location on the north side of the substation towards the river		lot	1		

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
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
2.15.7	LV Power and Control cables and accessories for auxiliary supply, protection, control, metering including accessories		lot	1		
2.15.8	All other necessary equipment and materials to complete the supply and the installation		lot	1		
2.16	**Earthing and lightning protection systems**		lot	1		
2.17	**Lighting and small power system**		lot	1		
2.18	**Fire Protection system**					
2.18.1	Fire detection system		lot	1		
2.18.2	Portable fire extinguishers		lot	1		
2.18.3	**Fire fighting system**					
2.18.3.1	Containerised fire fighting pump system		lot	1		
2.18.3.2	Fire fighting water tank		lot	1		
2.18.3.3	Fire fighting water supply pump with well		lot	1		
2.18.3.4	Transformer deluge systems for power transformers		set	6		
2.18.3.5	Fire hydrant network and interconnection piping		lot	1		
2.18.3.6	All accessories necessary for the satisfactory operation of the system but which are not separately listed		lot	1		
2.19	**CCTV system**					
2.19.1	Central unit		set	1		
2.19.2	Control panel		set	1		
2.19.3	Monitor		set	2		
2.19.4	Indoor Camera		lot	1		
2.19.5	Outdoor Camera		lot	1		
2.19.6	All other necessary equipment and materials to complete the extension		lot	1		
3	**Mandatory Spare Parts**					
3.1	**High Voltage GIS equipment**					
3.1.1	**For 220 kV GIS**					
3.1.1.1	Close coils (four of each type installed)		lot	1		
3.1.1.2	Trip coils (four of each type installed)		lot	1		
3.1.2	**For 132 kV GIS**					
3.1.2.1	Close coils (four of each type installed)		lot	1		
3.1.2.2	Trip coils (four of each type installed)		lot	1		
3.2	**High Voltage AIS equipment**					
3.2.1	**For 220 kV equipment**					
3.2.1.1	1-ph capacitive voltage transformer		nos	2		
3.2.1.2	1-ph lighting arrester, including one counter		nos	3		
3.2.1.3	Tension insulator set		set	3		
3.2.1.4	Suspension insulator set		set	3		
3.2.1.5	Clamps and fittings (five of of each type installed)		set	1		
3.2.2	**For 132 kV circuit breakers**					
3.2.2.1	Single pole of circuit breaker		set	1		
3.2.2.2	Driving mechanism single-pole		set	1		
3.2.2.3	Close coils (four of each type installed)		lot	1		
3.2.2.4	Trip coils (four of each type installed)		lot	1		
3.2.3	**For 132 kV disconnectors and earthing switches**					
3.2.3.1	Disconnector contacts		set	2		
3.2.3.2	Earthing switch contacts		set	2		
3.2.3.3	Motor of disconnector drive		set	1		
3.2.3.4	Motor of earthing switch drive		set	1		
3.2.3.5	Aux. contact block for disconnector and earthing switch		set	1		
3.2.4	**For other 132 kV equipment**					
3.2.4.1	1-ph lighting arrester, including one counter		nos	1		
3.2.4.2	Tension insulator set		set	5		
3.2.4.3	Suspension insulator set		set	5		
3.2.4.4	Clamps and fittings (ten of of each type installed)		set	1		

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
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
3.3	**Autotransformers and Power Transformers**					
3.3.1	**Bushing (one of each type HV/MV/LV/Neutral)**					
3.3.1.1	For 220/132/33 kV Autotransformers		lot	2		
3.3.1.2	For 220/132 kV Power Transformers		lot	1		
3.3.1.3	For 132/33 kV Power Transformers		lot	1		
3.3.1.4	For 33/11 kV Power Transformers		lot	1		
3.3.1.5	Transformer oil set of drums with minimum 5% of total oil volume of all transformers installed		lot	1		
3.3.1.6	Air drying agent sufficient quantity for 5 replacements for all transformers installed		lot	1		
3.4	**For MV switchgear**					
3.4.1	**For 33 kV switchgear**					
3.4.1.1	33kV Withdrawable Circuit Breaker with breaker trolley		nos	1		
3.4.1.2	33kV Surge arrester		nos	3		
3.4.1.3	33kV Fuse (six of each rating)		lot	1		
3.4.2	**For 11 kV switchgear**					
3.4.2.1	11kV Withdrawable Circuit Breaker with breaker trolley		nos	2		
3.4.2.2	11kV Surge arrester		nos	3		
3.4.2.3	11kV Fuse (six of each rating)		lot	1		
3.5	**For LV Auxiliary Power Supply System**					
3.5.1	**For 0.4 kV main switchgear / 220 V DC switchgear / 48 V DC switchgear**					
3.5.1.1	Incoming Circuit Breaker 5% of each type and rating totally installed but as a minimum 2 unit of each type and size		lot	1		
3.5.1.2	Outgoing Circuit Breaker 5% of each type and rating totally installed but as a minimum 2 unit of each type and size		lot	1		
3.5.1.3	Outgoing feeder terminal block (five complete three phase / PE / N blocks of each type and size)		lot	1		
3.5.1.4	Surge arrester		lot	1		
3.5.2	**Batteries**					
3.5.2.1	220 V battery cell Connector		nos	5		
3.5.2.2	48 V battery cell Connector		nos	5		
3.6	**For Diesel generator unit (DGU)**					
3.6.1	Air filter		set	3		
3.6.2	Oil filter		set	5		
3.6.3	Fuel filter		set	5		
3.6.4	Motor lube oil (three fillings)		lot	1		
3.6.5	Gaskets (two of each type)		lot	1		
3.7	**For protection equipment**					
3.7.1	Line differential protection relay (one of each type)		set	1		
3.7.2	Transformer differential protection relay (one of each type)		set	1		
3.7.3	Busbar differential protection relay decentral field unit (one of each type)		set	1		
3.7.4	Busbar differential protection relay entral unit (one of each type)		set	1		
3.7.5	Overcurrent protetction relay (one of each type)		set	1		
3.7.6	HV Bay Control unit (one of each type)		set	1		
3.7.7	Combined protection and bay control for MV switchgear		set	1		
3.7.8	Lockout Relay		set	4		
3.7.9	Trip circuit supervision Relay		set	4		
3.7.10	CT circuit test terminal block (complete for three phase circuit, ten of each type and size)		lot	2		
3.7.11	VT circuit test terminal block (complete for three phase circuit, ten of each type and size)		lot	2		

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
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
3.8	**For SCMS and SCADA system**					
3.8.1	Complete set of spare parts for the entire SCMS System of Lekhnath and Damauli substations, comprising at minimum 20% of each device applied per system but as a minimum 1 pc of each item		lot	1		
3.9	**For telecommunications system**					
3.9.1	Complete set of spare parts for the entire Telecommunication System of Lekhnath and Damauli substations, comprising at minimum 20% of each device applied per system but as a minimum 1 pc of each item		lot	1		
3.10	**Metering system**					
3.10.1	Meters (one of each type)		nos	2		
3.10.2	Communication equipment (Ethernet switches and Patch panels)		set	2		
3.10.3	GPRS-GSM communication device		set	1		
3.11	**For LV Auxiliary System, Protection, Metering and Control Cubicles, etc. in General**					
3.11.1	Miniature Circuit Breaker (MCB) 10% of each type and rating totally installed but as a minimum 2 units of each item		lot	1		
3.11.2	Fuses 10% of each type and rating totally installed but as a minimum six units of each type and rating		lot	1		
3.11.3	LV surge arrestors 10% of each type and rating totally installed but as a minimum two units of each type and rating		lot	1		
3.11.4	Control Switches, Selector Switches, Push buttons etc. 5% of each type and configuration totally installed but as a minimum 2 units of each type and size		lot	1		
3.11.5	Indicating lights 10% of each type and color totally installed but as a minimum 5 units of each type and color		lot	1		
3.11.6	Terminal block 10% of each type and size/rating totally installed but as a minimum: 50 terminals of each type and size up to and including 10 mm2 10 terminals of each type and size larger than 10 mm2		lot	1		
3.12	**For LV Installation**					
3.12.1	Small power outlets 10% of each type and rating installed but as a minimum 10 units of each type and rating		lot	1		
3.12.2	Power outlets 5% of each type and rating installed but as a minimum 2 units of each type and rating		lot	1		
3.12.3	Junction boxes 10% of each type and rating installed but as a minimum 5 units of each type and rating		lot	1		
3.12.4	Lighting Fixtures 5% of each type and rating installed but as a minimum 2 units of each type and rating		lot	1		
3.12.5	LED modules 20% of each type and rating installed but as a minimum 10 units of each type and rating		lot	1		
3.12.6	LED electronic control gear (ECG) 10% of each type and rating installed but as a minimum 5 units of each type and rating		lot	1		
3.13	**Fire Protection System**					
3.13.1	Fire detectors 5% of each type and rating installed but as a minimum 4 units of each type		lot	2		
3.13.2	Fire alarm break glass units 5% of each type and rating installed but as a minimum 4 units of each type		lot	2		
3.13.3	Spare break glass for fire alarm break glass units set with 10 break glasses		set	5		

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
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
3.13.4	Fire Alarm horn		set	2		
3.14	**For containerised fire fighting pump system**					
3.14.1	Air filter		set	3		
3.14.2	Oil filter		set	5		
3.14.3	Fuel filter		set	5		
3.14.4	Motor lube oil (three fillings)		lot	1		
3.14.5	Gaskets (two of each type)		lot	1		
3.15	**For deluges systems and hydrant network**					
3.15.1	Gaskets (two of each type)		lot	1		
3.16	**For Water supply system**					
3.16.1	Valve (one of each size and type)		lot	2		
3.16.2	Gaskets (five of each type)		lot	2		
3.16.3	Water filter		set	5		
3.17	**For Airconditioning system**					
3.17.1	Gaskets (five of each type)		set	2		
3.17.2	Air filter (three of each type)		set	4		
4.	**Special Tools**					
4.1	SF6 gas service cart		nos	1		
4.2	SF6 gas filling cart		nos	3		
4.3	Analyser for gas measurement		nos	1		
4.4	Portable SF6 gas leakage detector in a case		nos	3		
4.5	Density guard testing device in a case		nos	1		
4.6	Precision gauge with hose in transport case		nos	1		
4.7	Tool box with torque spanner for GIS (each type if different), etc..		set	3		
4.8	SF6 bottle (each type, if different) 40 kg (with gas)		set	6		
4.9	Insulation resistance test set (range 0.5 –1.0 - 2.5 - 5 - 10 kV)		set	2		
4.10	Calibration instruments for the line type heat detection		set	2		
4.11	Tools and test equipmnet for fore detectors		set	2		
	TOTAL (to Schedule No. VI Grand Summary)					
		Name of Bidder:				
		Signature of Bidder:				

Schedule II

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

Substation Package B					
Kreditanstalt für Wiederaufbau (KfW)					
Nepal Electricity Authority (NEA)					
Schedule No. II: Plant, and Mandatory Spare Parts Supplied from within the Employer's Country					
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
				EXW	**EXW**
				(NPR)	**(NPR)**
			1	2	3=1x2
1	**220kV Extension of the 132kV switchyard in Lekhnath**				
1.1	**Extension of existing 132kV Switchyard**				
1.1.1	**132kV Transformer Bays (E13, E14)**				
1.1.1.1	Set of 3-pole circuit breaker	set	2		
1.1.1.2	Sets of 3-pole disconnector with earthing switch	set	4		
1.1.1.3	Set of 3-pole pantograph disconnector	set	2		
1.1.1.4	1-pole current transformer	nos	6		
1.1.1.5	1-pole voltage transformer	nos	6		
1.1.1.6	Gantries for busbar and feeders	lot	1		
1.1.1.7	Busbar and feeder conductors	lot	1		
1.1.1.8	Insulators and fittings	lot	1		
1.1.1.9	All other necessary equipment and materials to complete the supply and the installation	lot	1		
1.1.2	**Transformer AIS equipment and auxiliary system for fast reconnection of the spare transformer unit**				
1.1.2.1	Surge arresters for the 220 kV transformer side	nos	7		
1.1.2.2	Surge arresters for the 132 kV transformer side	nos	7		
1.1.2.3	Surge arresters for the tertiary (11 kV) side	nos	7		
1.1.2.4	Gantries for 220 kV and 132 kV auxiliary busbar	lot	1		
1.1.2.5	OHL conductors for 220 kV and 132 kV auxiliary busbar for fast reconnection of the spare transformer unit	lot	1		
1.1.2.6	220 kV insulators and fittings	lot	1		
1.1.2.7	132 kV insulators and fittings	lot	1		
1.1.2.8	Materials for the interconnection of the auto-transformers tertiaries with the new 33 kV switchgear by means of busbar and cable including facility for fast reconnection of spare transformer	lot	1		
1.1.2.9	All other necessary equipment and materials to complete the supply and the installation	lot	1		
1.1.3	**Additional extension and relocation works**				
1.1.3.1	All necessary equipment and materials for relocation of existing lighting poles affected by the extension of the 132 kV switchyard	lot	1		
1.1.3.2	All necessary equipment and materials for relocation of two (2) existing lightning protection masts affected by the extension of the 132 kV switchyard	lot	1		
1.1.3.3	All necessary equipment and materials for relocation, within the substation's property, of an out-of-service transformer currently located in front of bay E14	lot	1		
1.2	**220/132/33kV Autotransformer**				
1.2.1	Single-phase autotransformers 220/132/33 kV 100 MVA/phase, equipped with on-load tap changer	nos	7		
1.2.2	Automatic voltage regulator, including the relevant software and integration in the SCMS	set	2		
1.2.3	Online transformer condition monitoring system, including the relevant software and integration in the SCMS	set	7		
1.2.4	All other necessary equipment and materials to complete the supply and the installation	lot	1		
1.3	**220 kV Gas Insulated Switchgear**				
1.3.1	Transformer bay (D03, D07) with GIB and SF6/air bushings	set	2		
1.3.2	Local control panel with bay cabling for feeder D03, D07	set	2		
1.3.3	OHL Bay (D04, D06) with GIB and SF6/air bushings	set	2		
1.3.4	Local control panel with bay cabling for feeder D04, D06	set	2		
1.3.5	Measuring Bay (D05)	set	1		
1.3.6	Bus Coupler Bay D05	set	1		
1.3.7	Local control panel with bay cabling for feeder D05 and (D05), including cable connections to bus bar measuring and bus bar earthing	set	1		
1.3.8	Sensors for partial discharge measurement	lot	1		
1.3.9	Provision (light sensor) for future arc detection	lot	1		
1.3.10	GIS steel supports for all bays and for GIB's, including wall bushings (material from GIS manufacturer for closing the wall openings)	lot	1		
1.3.11	Wall boards as specified (typical bay sections, single line diagram and gas compartment plan, gas density rules, gas temperature pressure curves etc.)	lot	1		
1.3.12	Key box including specified labelled keys and pad locks for 220kV GIS	lot	1		

Substation Package B					
Kreditanstalt für Wiederaufbau (KfW)					
Nepal Electricity Authority (NEA)					
Schedule No. II: Plant, and Mandatory Spare Parts Supplied from within the Employer's Country					
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
				EXW	**EXW**
				(NPR)	**(NPR)**
			1	2	3=1x2
1.3.13	All other necessary equipment and materials to complete the supply and the installation	lot	1		
1.4	**220 kV AIS Equipment**				
1.4.1	220kV OHL surge arresters	nos	6		
1.4.2	220kV capacitive voltage transformers	unit	6		
1.4.3	220 kV OHL gantry	lot	1		
1.4.4	220 kV insulators and fittings	lot	1		
1.4.5	All other necessary equipment and materials to complete the supply and the installation	lot	1		
1.5	**33 kV Switchgear**				
1.5.1	Outgoing feeder to auxiliary transformer (K02, K04)	set	2		
1.5.2	Riser measurement panel (K01, K03)	set	2		
1.5.3	All other necessary equipment, accessories and materials to complete the supply and the installation	lot	1		
1.6	**Zig Zag Earthing Auxiliary Transformers**				
1.6.1	Three-phase zig zag auxiliary transformers 33/0.4 kV, hermetically sealed type with off load tap changer, each of minimum 630 kVA	nos	2		
1.6.2	Tank mounted surge arresters for the primary (33 kV) side.	unit	6		
1.6.3	All other necessary equipment and materials to complete the supply and the installation	lot	1		
1.7	**LV Auxiliary Power Supply System**				
1.7.1	0.4 kV main switchgear, metal-clad type	set	1		
1.7.2	220 V DC switchgear with two bus sections	set	1		
1.7.3	220 V battery chargers	set	2		
1.7.4	220 V DC batteries of Ni-Cd type, each with a minimum capacity of 600 Ah (10h discharge rate)	set	2		
1.7.5	48 V DC switchgear with two bus sections	set	1		
1.7.6	48 V battery chargers	set	2		
1.7.7	48 V DC batteries of Ni-Cd type, each with a minimum capacity of 150 Ah	set	2		
1.7.8	230 V AC UPS System	set	2		
1.7.9	All other necessary equipment and materials to complete the supply and the installation	lot	1		
1.8	**Diesel generator unit (DGU)**				
1.8.1	Diesel generator unit, minimum of 50 kVA, in a prefabricated container equipped with fire-detection system and exhaust gas evacuation system including fuel tank	set	1		
1.8.2	All other necessary equipment and materials to complete the supply and the installation	lot	1		
1.9	**Protection & Control**				
1.9.1	220 kV OHL Protection Terminals and BCU (D04, D06)	set	2		
1.9.2	220kV Bus coupler (D05) and Busbar Protections and BCU	set	1		
1.9.3	300MVA 220 kV side autotransformer protection and BCU (D03, D07)	set	2		
1.9.4	300MVA 132kV side autotransformer protection and BCU (E13, E14)	set	2		
1.9.5	20MVA 33kV side autotransformer bay control and protection BCPU (K01, K03) (installed in MV Switchgear)	set	2		
1.9.6	Auxiliary Earthing Tansformer bay control and protection BCPU (K02, K04) (installed in MV Switchgear)	set	2		
1.9.7	Marshalling panel for the transformer control circuits for fast reconnection of spare transformer	set	2		
1.9.8	All other necessary equipment and materials to complete the supply and the installation	lot	1		
1.10	**Synchrophasor Measurement Unit (PMU)** for monitoring voltage and current as defined in the Scope, including software, documentation, cubicles, accessories	lot	1		

Substation Package B					
Kreditanstalt für Wiederaufbau (KfW)					
Nepal Electricity Authority (NEA)					
Schedule No. II: Plant, and Mandatory Spare Parts Supplied from within the Employer's Country					
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
				EXW	**EXW**
				(NPR)	**(NPR)**
			1	2	3=1x2
1.11	**SCADA and SCMS**				
1.11.1	SCADA and SCMS system for new 220/132/33/11 kV Substation including all necessary cabling, cubicles, desks, chairs, equipment and materials to complete the supply and the installation, The Contractor shall ensure that after handing over, a minimum of 50% spare function capacity (hardware and software, number of I/O to be handled by the SCMS)	set	1		
1.11.2	Equipment and material for interfacing with NLDC/ECC including all necessary cabling, cubicles, equipment and materials to complete the supply and the installation	set	1		
1.11.3	Equipment and material for interfacing with Existing Lekhnath 132 kV Substation including all necessary cabling, cubicles, equipment and materials to complete the supply and the installation	set	1		
1.12	**Telecommunication**				
1.12.1	SDH Equipment SDH node for FOC connections to the new 220/132/33/11kV GIS Damauli Substation and to the existing 132/33/11kV Lekhnath Substation	lot	1		
1.12.2	Fibre optical cables and patch cords	lot	1		
1.12.3	Optical Distribution Frame and accessories	lot	1		
1.12.4	IP-PBX telephony system, including appropriate telephone sets	lot	1		
1.12.5	All other necessary cubicles, software, equipment and materials to complete the supply and the installation	lot	1		
1.13	**Metering**				
1.13.1	Meter for 220kV OHL Main & Control	set	2		
1.13.2	Meter for 220/132/33 kV autotransformers (220 kV side and 132 kV side) Main & Control	set	4		
1.13.3	Meter for auxiliary transformers Main & Control	set	4		
1.13.4	Communication equipment (Ethernet Switches / Patch Panels / FOs / Cables etc..)	lot	1		
1.13.5	GPRS-GSM communication device	set	1		
1.13.6	Cabinet	lot	1		
1.13.7	Notebook PC including related software for local access for meter reading	set	1		
1.13.8	All other necessary, software, equipment and materials to complete the supply and the installation	lot	1		
1.14	**Power and Control Cables**				
1.14.1	33 kV Cables, sealing ends, terminals and accessories for33kV auxiliary system including accessories	lot	1		
1.14.2	LV Power and Control cables and accessories for auxiliary supply, protection, control, metering, fire protection, including accessories	lot	1		
1.14.3	All other necessary equipment and materials to complete the supply and the installation	lot	1		
1.15	**Earthing and lightning protection systems**	lot	1		
1.16	**Lighting and small power system**	lot	1		
1.17	**Fire Protection system**				
1.17.1	Fire detection system	lot	1		
1.17.2	Portable fire extinguishers	lot	1		
1.17.3	**Fire fighting system**				
1.17.3.1	Containerised fire fighting pump system	lot	1		
1.17.3.2	Fire fighting water tank	lot	1		
1.17.3.3	Fire fighting water supply pump with well	lot	1		
1.17.3.4	Transformer deluge systems for power transformers	set	7		
1.17.3.5	Fire hydrant network and interconnection piping	lot	1		
1.17.3.6	All accessories necessary for the satisfactory operation of the system but which are not separately listed	lot	1		
1.18	**CCTV system**				
1.18.1	Central unit	set	1		
1.18.2	Control panel	set	1		
1.18.3	Monitor	set	2		
1.18.4	Indoor Camera	lot	1		
1.18.5	Outdoor Camera	lot	1		

Substation Package B					
Kreditanstalt für Wiederaufbau (KfW)					
Nepal Electricity Authority (NEA)					
Schedule No. II: Plant, and Mandatory Spare Parts Supplied from within the Employer's Country					
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
				EXW	**EXW**
				(NPR)	**(NPR)**
			1	2	3=1x2
1.18.6	All other necessary equipment and materials to complete the extension	lot	1		
2	**Construction of 220/132/33/11 kV substation in Damauli**				
2.1	**220 kV Gas Insulated Switchgear**				
2.1.1	OHL Bays with GIB and SF6/air bushings (D06, D07, D08, D13, D14, D15)	set	6		
2.1.2	Local control panel with bay cabling for feeder (D06, D07, D08, D13, D14, D15)	set	6		
2.1.3	220/132kV Transformer Bay with GIB and SF6/air bushings (D09 and D12)	set	2		
2.1.4	Local control panel with bay cabling for feeder (D09 and D12)	set	2		
2.1.5	Bus Coupler Bays (D05, D16)	set	2		
2.1.6	Local control panel with bay cabling for feeder (D05, D16)	set	2		
2.1.7	Measuring Bays ((D10) and (D11))	set	2		
2.1.8	Busbar Sectionalizers (D10, D11)	set	2		
2.1.9	Local control panel with bay cabling for feeder D10 and D11, including cable connections to bus bar measuring and bus bar earthing	set	2		
2.1.10	Sensors for partial discharge measurement	lot	1		
2.1.11	Provision (light sensor) for future arc detection	lot	1		
2.1.12	GIS steel supports for all bays and for GIB's, including wall bushings (material from GIS manufacturer for closing the wall openings)	lot	1		
2.1.13	Wall boards as specified (typical bay sections, single line diagram and gas compartment plan, gas density rules, gas temperature pressure curves etc.)	lot	1		
2.1.14	Key box including specified labelled keys and pad locks for 220kV GIS	lot	1		
2.1.15	All other necessary equipment and materials to complete the supply and the installation	lot	1		
2.2	**220 kV AIS Equipment**				
2.2.1	220kV OHL surge arresters	nos	18		
2.2.2	220kV capacitive voltage transformers	nos	18		
2.2.3	220 kV OHL gantry	lot	1		
2.2.4	220 kV insulators and fittings	lot	1		
2.2.5	All other necessary equipment and materials to complete the supply and the installation	lot	1		
2.3	**132 kV Gas Insulated Switchgear**				
2.3.1	220/132kV Transformer Bays with GIB and SF6/air bushings (E02, E06)	set	2		
2.3.2	Local control panel with bay cabling for feeder E02, E06	set	2		
2.3.3	OHL Bays with GIB and SF6/air bushings (E03, E07)	set	2		
2.3.4	Local control panel with bay cabling for feeder E03, E07	set	2		
2.3.5	132/33kV Transformer Bay with cable conections (E01, E05)	set	2		
2.3.6	Local control panel with bay cabling for feeder E01, E05	set	2		
2.3.7	Measuring Bay (E04)	set	1		
2.3.8	Bus Coupler E04	set	1		
2.3.9	Local control panel with bay cabling for feeder E04 and (E04), including cable connections to bus bar measuring and bus bar earthing	set	1		
2.3.10	Sensors for partial discharge measurement	lot	1		
2.3.11	Provision (light sensor) for future arc detection	lot	1		
2.3.12	GIS steel supports for all bays and for GIB's, including wall bushings (material from GIS manufacturer for closing the wall openings)	lot	1		
2.3.13	Wall boards as specified (typical bay sections, single line diagram and gas compartment plan, gas density rules, gas temperature pressure curves etc.)	lot	1		
2.3.14	Key box including specified labelled keys and pad locks for 132kV GIS	lot	1		
2.3.15	All other necessary equipment and materials to complete the supply and the installation	lot	1		
2.4	**132 kV AIS Equipment**				
2.4.1	132 kV OHL surge arresters	nos	6		
2.4.2	132 kV capacitive voltage transformers	nos	6		
2.4.3	132 kV OHL gantry	lot	1		
2.4.4	132 kV insulators and fittings	lot	1		
2.4.5	All other necessary equipment and materials to complete the supply and the installation	lot	1		

Substation Package B					
Kreditanstalt für Wiederaufbau (KfW)					
Nepal Electricity Authority (NEA)					
Schedule No. II: Plant, and Mandatory Spare Parts Supplied from within the Employer's Country					
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
				EXW	**EXW**
				(NPR)	**(NPR)**
			1	2	3=1x2
2.5	**Power Transformers**				
2.5.1	**220/132 Power Transformer**				
2.5.1.1	Three-phase power transformer 220/132 kV 50/63 MVA, equipped with on-load tap changer	nos	2		
2.5.1.2	line surge arresters for the primary (220 kV) side	nos	6		
2.5.1.3	line surge arresters for the secondary (132 kV) side	nos	6		
2.5.1.4	automatic voltage regulator, including the relevant software and integration in the SCMS	set	2		
2.5.1.5	All other necessary equipment and materials to complete the supply and the installation	lot	1		
2.5.2	**132/33 kV Power Transformer**				
2.5.2.1	Three-phase power transformer 132/33kV 24/30 MVA, equipped with on-load tap changer	nos	2		
2.5.2.2	Line surge arresters for the secondary (132 kV) side	nos	6		
2.5.2.3	Line surge arresters for the secondary (33 kV) side	nos	6		
2.5.2.4	Automatic voltage regulator, including the relevant software and integration in the SCMS	set	2		
2.5.2.5	All other necessary equipment and materials to complete the supply and the installation	lot	1		
2.5.3	**33/11 kV Power Transformer**				
2.5.3.1	Three-phase power transformer 33/11kV 6/8 MVA, equipped with on-load tap changer	nos	2		
2.5.3.2	Line surge arresters for the secondary (33 kV) side	nos	6		
2.5.3.3	Line surge arresters for the secondary (11 kV) side	nos	6		
2.5.3.4	Automatic voltage regulator, including the relevant software and integration in the SCMS	set	2		
2.5.3.5	All other necessary equipment and materials to complete the supply and the installation	lot	1		
2.6	**MV Metal Clad AIS Switchgear**				
2.6.1	**33 kV Switchgear**				
2.6.1.1	Incomers for 132/33kV transformer connection (J02, J11)	nos	2		
2.6.1.2	Outgoing feeders (J04, J10)	nos	2		
2.6.1.3	Outgoing feeder 33/11 kV transformer (J03, J12)	nos	2		
2.6.1.4	Outgoing feeders to auxiliary transformer (J05, J09)	nos	2		
2.6.1.5	Bus tie (J07)	nos	1		
2.6.1.6	Riser measurement panel (J08)	nos	1		
2.6.1.7	Measurement panel (J06)	nos	1		
2.6.1.8	All other necessary equipment, accessories and materials to complete the supply and the installation	lot	1		
2.6.2	**11 kV Switchgear**				
2.6.2.1	Incomers for 33/11kV transformer connection (K03, K08)	nos	2		
2.6.2.2	Outgoing feeders (K04, K05, K09, K11, K12)	nos	5		
2.6.2.3	Bus tie (K07)	nos	1		
2.6.2.4	Riser measurement panel (K06)	nos	1		
2.6.2.5	Measurement panel (K10)	nos	1		
2.6.2.6	All other necessary equipment, accessories and materials to complete the supply and the installation	lot	1		
2.7	**Auxiliary Transformers**				
2.7.1	Three-phase auxiliary transformers 33/0.4 kV, hermetically sealed type with off load tap changer, each of minimum 630 kVA	nos	2		
2.7.2	Tank mounted surge arresters for the primary (33 kV) side.	nos	6		
2.7.3	All other necessary equipment and materials to complete the supply and the installation	lot	1		

Substation Package B					
Kreditanstalt für Wiederaufbau (KfW)					
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Schedule No. II: Plant, and Mandatory Spare Parts Supplied from within the Employer's Country					
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
				EXW	**EXW**
				(NPR)	**(NPR)**
			1	2	3=1x2
2.8	**LV Auxiliary Power Supply System**				
2.8.1	0.4 kV main switchgear, metal-clad type	set	1		
2.8.2	220 V DC switchgear with two bus sections	set	1		
2.8.3	220 V battery chargers	set	2		
2.8.4	220 V DC batteries of Ni-Cd type, each with a minimum capacity of 600 Ah (10h discharge rate)	set	2		
2.8.5	48 V DC switchgear with two bus sections	set	1		
2.8.6	48 V battery chargers	set	2		
2.8.7	48 V DC batteries of Ni-Cd type, each with a minimum capacity of 150 Ah	set	2		
2.8.8	230 V AC UPS System	set	2		
2.8.9	All other necessary equipment and materials to complete the supply and the installation	lot	1		
2.9	**Diesel generator unit (DGU)**				
2.9.1	Diesel generator unit, minimum of 100 kVA, in a prefabricated container equipped with fire-detection system and exhaust gas evacuation system including fuel tank	set	1		
2.9.2	All other necessary equipment and materials to complete the supply and the installation	lot	1		
2.10	**Protection & Control**				
2.10.1	220 kV OHL Protection Terminals and BCU (D06, D07, D08, D13, D14, D15)	set	6		
2.10.2	220kV Bus-sectionaliser and Busbar protection and BCU (D10, D11)	set	2		
2.10.3	220kV Bus-coupler and Busbar protection (D05, D16)	set	2		
2.10.4	50/63 MVA 220/132 kV Transformer 220 kV side protection and BCU (D09, D12)	set	2		
2.10.5	50/63 MVA 220/132/ kV Transformer 132 kV side protection and BCU (E02, E06)	set	2		
2.10.6	132 kV OHL Protection Terminals and BCU (E03, E07)	set	2		
2.10.7	132kV Bus-coupler and Busbar protections and BCU (E04)	set	1		
2.10.8	132/33kV 24/30 MVA Transformer feeder protection 132 kV side and BCU (E01, E05)	set	2		
2.10.9	132/33kV 24/30 MVA Transformer feeder bay control and protection (BCPU) 33 kV side (J02, J09) (installed in 33 kV switchgear)	set	2		
2.10.10	33kV Bus-coupler bay control and protection (BCPU) (J07) (installed in 33 kV switchgear)	set	1		
2.10.11	33kV Feeder bay control and protection (BCPU) (J04, J08)	set	2		
2.10.12	33/11kV 8/10MVA Transformer feeder bay control and protection (BCPU) 33 kV side (J03, J10) (installed in 33 kV switchgear)	set	2		
2.10.13	33/11kV 8/10MVA Transformer feeder protection 11 kV side (K03, K08) (installed in 11 kV switchgear)	set	2		
2.10.14	11kV Feeder bay control and protection (BCPU) (K04, K05, K11, K12, K13, K14) (installed in 11 kV switchgear)	set	5		
2.10.15	11kV Auxiliary Transformer Feeder bay control and protection (BCPU) (K06, K10) (installed in 11 kV switchgear)	set	2		
2.10.16	11kV Bus-coupler protection (K07)	set	1		
2.10.17	All other necessary equipment and materials to complete the supply and the installation	lot	1		
2.11	**Synchrophasor Measurement Unit (PMU)** for monitoring voltage and current as defined in the Scope, including software, documentation, cubicles, accessories	set	1		
2.12	**SCADA and SCMS**				
2.12.1	SCADA and SCMS system for new 220/132/33/11 kV Substation including all necessary cabling, cubicles, desks, chairs, equipment and materials to complete the supply and the installation, The Contractor shall ensure that after handing over, a minimum of 50% spare function capacity (hardware and software, number of I/O to be handled by the SCMS)	lot	1		

Substation Package B					
Kreditanstalt für Wiederaufbau (KfW)					
Nepal Electricity Authority (NEA)					
Schedule No. II: Plant, and Mandatory Spare Parts Supplied from within the Employer's Country					
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
				EXW	**EXW**
				(NPR)	**(NPR)**
			1	2	3=1x2
2.12.2	Equipment and material for interfacing with NLDC/ECC including all necessary cabling, cubicles, equipment and materials to complete the supply and the installation	lot	1		
2.12.3	Equipment and material for interfacing with future New Damauli 400 kV Substation including all necessary cabling, cubicles, equipment and materials to complete the supply and the installation	lot	1		
2.13	**Telecommunication**				
2.13.1	SDH Equipment SDH node for FOC connections of new 220 kV GIS Lekhnath Substation, to Tanahu HPP, 220 kV Bharatpur Substation, Old Damauli and 132 kV Bharatpur.	lot	1		
2.13.2	Fibre optical cables, including approach cable from splicing box to SDH equipment and patch cords	lot	1		
2.13.3	Optical Distribution Frame and accessories	lot	1		
2.13.4	IP-PBX telephony system, including appropriate telephone sets	lot	1		
2.13.5	All other necessary cubicles, software, equipment and materials to complete the supply and the installation	lot	1		
2.14	**Metering**				
2.14.1	Meter for 220kV OHL Main & Control	set	6		
2.14.2	Meter for 132 OHL Main & Control	set	2		
2.14.3	Meter for 220/132 kV Transformers, (220 kV side and 132 kV side), Main & Control	set	4		
2.14.4	Meter for 132/33 kV Transformers, 132 kV side and 33 kV side), Main & Control	set	4		
2.14.5	Meter for 33/11 kV Transformers, (33 kV side and 11 kV side), Main & Control	set	4		
2.14.6	Meter for 33 kV Feeders Main & Control	set	2		
2.14.7	Meter for 11 kV Feeders Main & Control	set	5		
2.14.8	Meter for auxiliary transformers Main & Control	set	2		
2.14.9	Communication equipment (Ethernet Switches / Patch Panels / FOs / Cables etc..)	lot	1		
2.14.10	GPRS-GSM communication device	lot	1		
2.14.11	Cabinet	lot	1		
2.14.12	Notebook PC including related software for local access for meter reading	set	1		
2.14.13	All other necessary, software, equipment and materials to complete the supply and the installation	lot	1		
2.15	**Power and Control Cables**				
2.15.1	HV cable systems comprising 132 kV XLPE cables for the connection between the secondary windings of 220/132 kV transformers and the 132 kV switchgear	lot	1		
2.15.2	MV cable systems comprising 33 kV XLPE cables for the connection between secondary windings of 132/33 kV transformers and 33 kV switchgear	lot	1		
2.15.3	MV cable systems comprising 33 kV XLPE cables for the connection between 33 kV switchgear and 33/11 kV transformers	lot	1		
2.15.4	MV cable systems comprising 33 kV XLPE cables for the connection between 33kV switchgear and auxiliary transformers	lot	1		
2.15.5	MV cable systems comprising 11 kV XLPE cables for the connection between secondary windings of 33/11 kV transformers and 11 kV switchgear	lot	1		
2.15.6	MV cable systems comprising 11 kV XLPE cables for the connection of three 11 kV feeders between between 11 kV switchgear and distribution OHL pole location on the north side of the substation towards the river	lot	1		
2.15.7	LV Power and Control cables and accessories for auxiliary supply, protection, control, metering including accessories	lot	1		

Substation Package B					
Kreditanstalt für Wiederaufbau (KfW)					
Nepal Electricity Authority (NEA)					
Schedule No. II: Plant, and Mandatory Spare Parts Supplied from within the Employer's Country					
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
				EXW	**EXW**
				(NPR)	**(NPR)**
			1	2	3=1x2
2.15.8	All other necessary equipment and materials to complete the supply and the installation	lot	1		
2.16	**Earthing and lightning protection systems**	lot	1		
2.17	**Lighting and small power system**	lot	1		
2.18	**Fire Protection system**				
2.18.1	Fire detection system	lot	1		
2.18.2	Portable fire extinguishers	lot	1		
2.18.3	**Fire fighting system**				
2.18.3.1	Containerised fire fighting pump system	lot	1		
2.18.3.2	Fire fighting water tank	lot	1		
2.18.3.3	Fire fighting water supply pump with well	lot	1		
2.18.3.4	Transformer deluge systems for power transformers	set	6		
2.18.3.5	Fire hydrant network and interconnection piping	lot	1		
2.18.3.6	All accessories necessary for the satisfactory operation of the system but which are not separately listed	lot	1		
2.19	**CCTV system**				
2.19.1	Central unit	set	1		
2.19.2	Control panel	set	1		
2.19.3	Monitor	set	2		
2.19.4	Indoor Camera	lot	1		
2.19.5	Outdoor Camera	lot	1		
2.19.6	All other necessary equipment and materials to complete the extension	lot	1		
3	**Mandatory Spare Parts**				
3.1	**High Voltage GIS equipment**				
3.1.1	**For 220 kV GIS**				
3.1.1.1	Close coils (four of each type installed)	lot	1		
3.1.1.2	Trip coils (four of each type installed)	lot	1		
3.1.2	**For 132 kV GIS**				
3.1.2.1	Close coils (four of each type installed)	lot	1		
3.1.2.2	Trip coils (four of each type installed)	lot	1		
3.2	**High Voltage AIS equipment**				
3.2.1	**For 220 kV equipment**				
3.2.1.1	1-ph capacitive voltage transformer	nos	2		
3.2.1.2	1-ph lighting arrester, including one counter	nos	3		
3.2.1.3	Tension insulator set	set	3		
3.2.1.4	Suspension insulator set	set	3		
3.2.1.5	Clamps and fittings (five of of each type installed)	set	1		
3.2.2	**For 132 kV circuit breakers**				
3.2.2.1	Single pole of circuit breaker	set	1		
3.2.2.2	Driving mechanism single-pole	set	1		
3.2.2.3	Close coils (four of each type installed)	lot	1		
3.2.2.4	Trip coils (four of each type installed)	lot	1		
3.2.3	**For 132 kV disconnectors and earthing switches**				
3.2.3.1	Disconnector contacts	set	2		
3.2.3.2	Earthing switch contacts	set	2		
3.2.3.3	Motor of disconnector drive	set	1		
3.2.3.4	Motor of earthing switch drive	set	1		
3.2.3.5	Aux. contact block for disconnector and earthing switch	set	1		
3.2.4	**For other 132 kV equipment**				
3.2.4.1	1-ph lighting arrester, including one counter	nos	1		
3.2.4.2	Tension insulator set	set	5		

Substation Package B					
Kreditanstalt für Wiederaufbau (KfW)					
Nepal Electricity Authority (NEA)					
Schedule No. II: Plant, and Mandatory Spare Parts Supplied from within the Employer's Country					
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
				EXW	**EXW**
				(NPR)	**(NPR)**
			1	2	3=1x2
3.2.4.3	Suspension insulator set	set	5		
3.2.4.4	Clamps and fittings (ten of of each type installed)	set	1		
3.3	**Autotransformers and Power Transformers**				
3.3.1	**Bushing (one of each type HV/MV/LV/Neutral)**				
3.3.1.1	For 220/132/33 kV Autotransformers	lot	2		
3.3.1.2	For 220/132 kV Power Transformers	lot	1		
3.3.1.3	For 132/33 kV Power Transformers	lot	1		
3.3.1.4	For 33/11 kV Power Transformers	lot	1		
3.3.1.5	Transformer oil set of drums with minimum 5% of total oil volume of all transformers installed	lot	1		
3.3.1.6	Air drying agent sufficient quantity for 5 replacements for all transformers installed	lot	1		
3.4	**For MV switchgear**				
3.4.1	**For 33 kV switchgear**				
3.4.1.1	33kV Withdrawable Circuit Breaker with breaker trolley	nos	1		
3.4.1.2	33kV Surge arrester	nos	3		
3.4.1.3	33kV Fuse (six of each rating)	lot	1		
3.4.2	**For 11 kV switchgear**				
3.4.2.1	11kV Withdrawable Circuit Breaker with breaker trolley	nos	2		
3.4.2.2	11kV Surge arrester	nos	3		
3.4.2.3	11kV Fuse (six of each rating)	lot	1		
3.5	**For LV Auxiliary Power Supply System**				
3.5.1	**For 0.4 kV main switchgear / 220 V DC switchgear / 48 V DC switchgear**				
3.5.1.1	Incoming Circuit Breaker 5% of each type and rating totally installed but as a minimum 2 unit of each type and size	lot	1		
3.5.1.2	Outgoing Circuit Breaker 5% of each type and rating totally installed but as a minimum 2 unit of each type and size	lot	1		
3.5.1.3	Outgoing feeder terminal block (five complete three phase / PE / N blocks of each type and size)	lot	1		
3.5.1.4	Surge arrester	lot	1		
3.5.2	**Batteries**				
3.5.2.1	220 V battery cell Connector	nos	5		
3.5.2.2	48 V battery cell Connector	nos	5		
3.6	**For Diesel generator unit (DGU)**				
3.6.1	Air filter	set	3		
3.6.2	Oil filter	set	5		
3.6.3	Fuel filter	set	5		
3.6.4	Motor lube oil (three fillings)	lot	1		
3.6.5	Gaskets (two of each type)	lot	1		
3.7	**For protection equipment**				
3.7.1	Line differential protection relay (one of each type)	set	1		
3.7.2	Transformer differential protection relay (one of each type)	set	1		
3.7.3	Busbar differential protection relay decentral field unit (one of each type)	set	1		
3.7.4	Busbar differential protection relay entral unit (one of each type)	set	1		
3.7.5	Overcurrent protetction relay (one of each type)	set	1		
3.7.6	HV Bay Control unit (one of each type)	set	1		
3.7.7	Combined protection and bay control for MV switchgear	set	1		
3.7.8	Lockout Relay	set	4		
3.7.9	Trip circuit supervision Relay	set	4		
3.7.10	CT circuit test terminal block (complete for three phase circuit, ten of each type and size)	lot	2		
3.7.11	VT circuit test terminal block (complete for three phase circuit, ten of each type and size)	lot	2		

Substation Package B					
Kreditanstalt für Wiederaufbau (KfW)					
Nepal Electricity Authority (NEA)					
Schedule No. II: Plant, and Mandatory Spare Parts Supplied from within the Employer's Country					
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
				EXW	**EXW**
				(NPR)	**(NPR)**
			1	2	3=1x2
3.8	**For SCMS and SCADA system**				
3.8.1	Complete set of spare parts for the entire SCMS System of Lekhnath and Damauli substations, comprising at minimum 20% of each device applied per system but as a minimum 1 pc of each item	lot	1		
3.9	**For telecommunications system**				
3.9.1	Complete set of spare parts for the entire Telecommunication System of Lekhnath and Damauli substations, comprising at minimum 20% of each device applied per system but as a minimum 1 pc of each item	lot	1		
3.10	**Metering system**				
3.10.1	Meters (one of each type)	nos	2		
3.10.2	Communication equipment (Ethernet switches and Patch panels)	set	2		
3.10.3	GPRS-GSM communication device	set	1		
3.11	**For LV Auxiliary System, Protection, Metering and Control Cubicles, etc. in General**				
3.11.1	Miniature Circuit Breaker (MCB) 10% of each type and rating totally installed but as a minimum 2 units of each item	lot	1		
3.11.2	Fuses 10% of each type and rating totally installed but as a minimum six units of each type and rating	lot	1		
3.11.3	LV surge arrestors 10% of each type and rating totally installed but as a minimum two units of each type and rating	lot	1		
3.11.4	Control Switches, Selector Switches, Push buttons etc. 5% of each type and configuration totally installed but as a minimum 2 units of each type and size	lot	1		
3.11.5	Indicating lights 10% of each type and color totally installed but as a minimum 5 units of each type and color	lot	1		
3.11.6	Terminal block 10% of each type and size/rating totally installed but as a minimum: 50 terminals of each type and size up to and including 10 mm2 10 terminals of each type and size larger than 10 mm2	lot	1		
3.12	**For LV Installation**				
3.12.1	Small power outlets 10% of each type and rating installed but as a minimum 10 units of each type and rating	lot	1		
3.12.2	Power outlets 5% of each type and rating installed but as a minimum 2 units of each type and rating	lot	1		
3.12.3	Junction boxes 10% of each type and rating installed but as a minimum 5 units of each type and rating	lot	1		
3.12.4	Lighting Fixtures 5% of each type and rating installed but as a minimum 2 units of each type and rating	lot	1		
3.12.5	LED modules 20% of each type and rating installed but as a minimum 10 units of each type and rating	lot	1		
3.12.6	LED electronic control gear (ECG) 10% of each type and rating installed but as a minimum 5 units of each type and rating	lot	1		
3.13	**Fire Protection System**				
3.13.1	Fire detectors 5% of each type and rating installed but as a minimum 4 units of each type	lot	2		
3.13.2	Fire alarm break glass units 5% of each type and rating installed but as a minimum 4 units of each type	lot	2		
3.13.2	Spare break glass for fire alarm break glass units set with 10 break glasses	set	5		
3.13.3	Fire Alarm horn	set	2		

Substation Package B					
Kreditanstalt für Wiederaufbau (KfW)					
Nepal Electricity Authority (NEA)					
Schedule No. II: Plant, and Mandatory Spare Parts Supplied from within the Employer's Country					
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
				EXW	**EXW**
				(NPR)	**(NPR)**
			1	2	3=1x2
3.14	**For containerised fire fighting pump system**				
3.14.1	Air filter	set	3		
3.14.2	Oil filter	set	5		
3.14.3	Fuel filter	set	5		
3.14.4	Motor lube oil (three fillings)	lot	1		
3.14.5	Gaskets (two of each type)	lot	1		
3.15	**For deluges systems and hydrant network**				
3.15.1	Gaskets (two of each type)	lot	1		
3.16	**For Water supply system**				
3.16.1	Valve (one of each size and type)	lot	2		
3.16.2	Gaskets (five of each type)	lot	2		
3.16.3	Water filter	set	5		
3.17	**For Airconditioning system**				
3.17.1	Gaskets (five of each type)	set	2		
3.17.2	Air filter (three of each type)	set	4		
4.	**Special Tools**				
4.1	SF6 gas service cart	nos	1		
4.2	SF6 gas filling cart	nos	3		
4.3	Analyser for gas measurement	nos	1		
4.4	Portable SF6 gas leakage detector in a case	nos	3		
4.5	Density guard testing device in a case	nos	1		
4.6	Precision gauge with hose in transport case	nos	1		
4.7	Tool box with torque spanner for GIS (each type if different), etc..	set	3		
4.8	SF6 bottle (each type, if different) 40 kg (with gas)	set	6		
4.9	Insulation resistance test set (range 0.5 –1.0 - 2.5 - 5 - 10 kV)	set	2		
4.10	Calibration instruments for the line type heat detection	set	2		
4.11	Tools and test equipmnet for fore detectors	set	2		
	TOTAL (to Schedule No. VI Grand Summary)				
	Name of Bidder:				
	Signature of Bidder:				

Schedule III

Design Services

Substation Package B					
Kreditanstalt für Wiederaufbau (KfW)					
Nepal Electricity Authority (NEA)					
Schedule No. III: Design Services					
Item	**Description**	**Unit**	**Quantity**	**Unit Price (USD)**	**Total Price (USD)**
			1	2	3=1x2
1	**Construction of 220kV Extension of the 132kV switchyard in Lekhnath**				
1.1	**Electrical Works**	lot	1		
1.1.1	Electrical System Design	lot	1		
1.1.2	Protection system design including PMU and metering	lot	1		
1.1.3	**SCADA and SCMS design**				
1.1.3.1	SCADA and SCMS system for new 220 kV Substation	lot	1		
1.1.3.2	Design for interfacing with NLDC/ECC	lot	1		
1.1.3.3	Design for interfacing with Existing Lekhnath 132 kV Substation	lot	1		
1.1.4	Telecommunication design	lot	1		
1.1.5	Electical installation design, including power and control cable systems, earthing and lightning protection systems, lighting and small power system, fire detection system	lot	1		
1.1.6	**Other design items**				
1.1.6.1	Earthing resistance test, earthing study and earthing system test	lot	1		
1.1.6.2	Insulation Coordination Study	lot	1		
1.1.6.3	Protection Settings Study and Adjustments	lot	1		
1.1.6.4	132 kV Cable System Studies	lot	1		
1.1.6.5	Transport study for large and heavy equipment	lot	1		
1.2	**Civil Works**				
1.2.1	Topographical surveys soil investigations	lot	1		
1.2.2	Document Preparation and Submission for Permits	lot	1		
1.2.3	Building design	lot	1		
1.2.4	Transformer and equipment foundation design	lot	1		
1.2.5	Design of channels, ducts etc. for cables	lot	1		
1.2.6	Design of roads, paving, landscaping, fencing, gates	lot	1		
1.2.7	Design of site preparation, leveling and compacting, temporary facilities	lot	1		
1.2.8	Design of water supply system	lot	1		
1.2.9	Design of drainage and sewage systems	lot	1		
1.2.10	Design of air-conditioning, ventilation and heating systems	lot	1		
1.2.11	Design of overhead Traveling Crane	lot	1		
1.2.12	Design of fire protection system	lot	1		
2	**Construction of 220/132/33/11 kV Substation in Damauli**				
2.1	**Electrical Works**	lot	1		
2.1.1	Electrical System Design	lot	1		
2.1.2	Protection system design including PMU and metering	lot	1		
2.1.3	**SCADA and SCMS design**				
2.1.3.1	SCADA and SCMS system for new 220 kV Substation	lot	1		
2.1.3.2	Design for interfacing with NLDC/ECC	lot	1		
2.1.3.3	Design for interfacing with future New Damauli 400 kV	lot	1		
2.1.4	Telecommunication design	lot	1		
2.1.5	Electical installation design, including power and control cable systems, earthing and lightning protection systems, lighting and small power system, fire detection system	lot	1		
2.1.6	**Other design items**				
2.1.6.1	Earthing resistance test, earthing study and earthing system test	lot	1		
2.1.6.2	Insulation Coordination Study	lot	1		
2.1.6.3	Protection Settings Study and Adjustments in Other Substations	lot	1		
2.2	**Civil Works**				
2.2.1	Topographical surveys soil investigations	lot	1		
2.2.2	Document Preparation and Submission for Permits	lot	1		
2.2.3	Building design	lot	1		
2.2.4	Transformer and equipment foundation design	lot	1		
2.2.5	Design of channels, ducts etc. for cables	lot	1		
2.2.6	Design of roads, paving, landscaping, fencing, gates	lot	1		
2.2.7	Design of site preparation, leveling and compacting, temporary facilities	lot	1		
2.2.8	Design of flood protection works	lot	1		
2.2.9	Design of water supply system	lot	1		
2.2.10	Design of drainage and sewage systems	lot	1		
2.2.11	Design of air-conditioning, ventilation and heating systems	lot	1		
2.2.12	Design of overhead Traveling Crane	lot	1		
2.2.12	Design of fire protection system	lot	1		
	TOTAL (to Schedule No. III Grand Summary)				
		Name of Bidder:			
		Signature of Bidder:			

Schedule IV

Installation and Other Services

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
Schedule No. IV: Installation and Other Services						
Item	**Description**	**Unit**	**Quantity**	**Unit Price Inland Transportation**	**Unit Price Installation and other Services**	**Total Price**
				(NPR)	**(NPR)**	**(NPR)**
			1	2	3	4=1x(2+3)
1	**220kV Extension of the 132kV switchyard in Lekhnath**					
1.1	**Extension of existing 132kV Switchyard**					
1.1.1	**132kV Transformer Bays (E13, E14)**					
1.1.1.1	Set of 3-pole circuit breaker	set	2			
1.1.1.2	Sets of 3-pole disconnector with earthing switch	set	4			
1.1.1.3	Set of 3-pole pantograph disconnector	set	2			
1.1.1.4	1-pole current transformer	units	6			
1.1.1.5	1-pole voltage transformer	units	6			
1.1.1.6	Gantries for busbar and feeders	lot	1			
1.1.1.7	Busbar and feeder conductors	lot	1			
1.1.1.8	Insulators and fittings	lot	1			
1.1.1.9	All other necessary equipment and materials to complete the supply and the installation	lot	1			
1.1.2	**Transformer AIS equipment and auxiliary system for fast reconnection of the spare transformer unit**					
1.1.2.1	Surge arresters for the 220 kV transformer side	units	7			
1.1.2.2	Surge arresters for the 132 kV transformer side	units	7			
1.1.2.3	Surge arresters for the tertiary (11 kV) side	units	7			
1.1.2.4	Gantries for 220 kV and 132 kV auxiliary busbar	lot	1			
1.1.2.5	OHL conductors for 220 kV and 132 kV auxiliary busbar for fast reconnection of the spare transformer unit	lot	1			
1.1.2.6	220 kV insulators and fittings	lot	1			
1.1.2.7	132 kV insulators and fittings	lot				
1.1.2.8	Interconnection of the auto-transformers tertiaries with the new 33 kV switchgear by means of busbar and cable including facility for fast reconnection of spare transformer	lot	1			
1.1.2.9	All other necessary work to complete the supply and the installation	lot	1			
1.1.3	**Additional extension and relocation works**					
1.1.3.1	Relocation of existing lighting poles affected by the extension of the 132 kV switchyard	lot	1			
1.1.3.2	Relocation of two (2) existing lightning protection masts affected by the extension of the 132 kV switchyard	lot	1			
1.1.3.3	Relocation, within the substation's property, of an out-of-service transformer currently located in front of bay E14	lot	1			
1.2	**220/132/11kV Autotransformer**					
1.2.1	Single-phase autotransformers 220/132/33 kV 100 MVA/phase, equipped with on-load tap changer	unit	7			
1.2.2	Automatic voltage regulator, including the relevant software and integration in the SCMS	set	2			
1.2.3	Online transformer condition monitoring system, including the relevant software and integration in the SCMS.	set	7			
1.2.4	All other necessary equipment and materials to complete the supply and the installation	lot	1			
1.3	**220 kV Gas Insulated Switchgear**					
1.3.1	Transformer bay (D03, D07) with GIB and SF6/air bushings	set	2			
1.3.2	Local control panel with bay cabling for feeder D03, D07	set	2			
1.3.3	OHL Bay (D04, D06) with GIB and SF6/air bushings	set	2			
1.3.4	Local control panel with bay cabling for feeder D04, D06	set	2			
1.3.5	Measuring Bay (D05)	set	1			
1.3.6	Bus Coupler Bay D05	set	1			
1.3.7	Local control panel with bay cabling for feeder D05 and (D05), including cable connections to bus bar measuring and bus bar earthing	set	1			
1.3.8	Online switchgear monitoring system for all 6 bays, including the relevant software and integration in the SCMS.	lot	1			
1.3.9	PD UHF measuring system for periodical measurement on site	lot	1			
1.3.10	GIS steel supports for all bays and for GIB's, including wall bushings (material from GIS manufacturer for closing the wall openings)	lot	1			
1.3.11	Wall boards as specified (typical bay sections, single line diagram and gas compartment plan, gas density rules, gas temperature pressure curves etc.)	lot	1			
1.3.12	Key box including specified labelled keys and pad locks for 220kV GIS	lot	1			
1.3.13	All other necessary equipment and materials to complete the supply and the installation	lot	1			
1.4	**220 kV AIS Equipment**					
1.4.1	220kV OHL surge arresters	unit	6			
1.4.2	220kV capacitive voltage transformers	unit	6			
1.4.3	220 kV OHL gantry	lot	1			
1.4.4	220 kV insulators and fittings	lot	1			
1.4.5	All other necessary equipment and materials to complete the supply and the installation	lot	1			
1.5	**33 kV Switchgear**					
1.5.1	Outgoing feeder to auxiliary transformer (K02, K04)	set	2			
1.5.2	Riser measurement panel (K01, K03)	set	2			

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
Schedule No. IV: Installation and Other Services						
Item	**Description**	**Unit**	**Quantity**	**Unit Price Inland Transportation**	**Unit Price Installation and other Services**	**Total Price**
				(NPR)	**(NPR)**	**(NPR)**
			1	2	3	4=1x(2+3)
1.5.3	All other necessary equipment, accessories and materials to complete the supply and the installation	lot	1			
1.6	**Zig Zag Earthing Auxiliary Transformers**					
1.6.1	Three-phase zig zag auxiliary transformers 33/0.4 kV, hermetically sealed type with off load tap changer, each of minimum 630 kVA	unit	2			
1.6.2	Tank mounted surge arresters for the primary (33 kV) side.	unit	6			
1.6.3	All other necessary equipment and materials to complete the supply and the installation	lot	1			
1.7	**LV Auxiliary Power Supply System**					
1.7.1	0.4 kV main switchgear, metal-clad type	set	1			
1.7.2	220 V DC switchgear with two bus sections	set	1			
1.7.3	220 V battery chargers	set	2			
1.7.4	220 V DC batteries of Ni-Cd type, each with a minimum capacity of 600 Ah (10h discharge rate)	set	2			
1.7.5	48 V DC switchgear with two bus sections	set	1			
1.7.6	48 V battery chargers	set	2			
1.7.7	48 V DC batteries of Ni-Cd type, each with a minimum capacity of 150 Ah	set	2			
1.7.8	230 V AC UPS System	set	2			
1.7.9	All other necessary equipment and materials to complete the supply and the installation	lot	1			
1.8	**Diesel generator unit (DGU)**					
1.8.1	Diesel generator unit, minimum of 50 kVA, in a prefabricated container equipped with fire-detection system and exhaust gas evacuation system including fuel tank	set	1			
1.8.2	All other necessary equipment and materials to complete the supply and the installation	lot	1			
1.9	**Protection**					
1.9.1	220 kV OHL Protection Terminals and BCU (D04, D06)	set	2			
1.9.2	220kV Bus coupler (D05) and Busbar Protections and BCU	set	1			
1.9.3	300MVA 220 kV side autotransformer protection and BCU (D03, D07)	set	2			
1.9.4	300MVA 132kV side autotransformer protection and BCU (E13, E14)	set	2			
1.9.5	20MVA 33kV side autotransformer bay control and protection BCPU (K01, K03) (installed in MV Switchgear)	set	2			
1.9.6	Auxiliary Earthing Tansformer bay control and protection BCPU (K02, K04) (installed in MV Switchgear)	set	2			
1.9.7	marshalling panel for the transformer control circuits for fast reconnection of spare transformer	set	2			
1.9.8	All other necessary equipment and materials to complete the supply and the installation	lot	1			
1.10	**Synchrophasor Measurement Unit (PMU)** for monitoring voltage and current as defined in the Scope, including software, documentation, cubicles, accessories	lot	1			
1.11	**SCADA and SCMS**					
1.11.1	SCADA and SCMS system for new 220 kV Substation includiong all necessary cabling, cubicles, equipment and materials to complete the supply and the installation	set	1			
1.11.2	Equipment and material for interfacing with NLDC/ECC including all necessary cabling, cubicles, equipment and materials to complete the supply and the installation	set	1			
1.11.3	Equipment and material for interfacing with Existing Lekhnath 132 kV Substation including all necessary cabling, cubicles, equipment and materials to complete the supply and the installation	set	1			
1.12	**Telecommunication**					
1.12.1	SDH Equipment SDH node for FOC connections to the new 220/132/33/11kV GIS Damauli Substation and to the existing 132/33/11kV Lekhnath Substation	lot	1			
1.12.2	Fibre optical cables and patch cords	lot	1			
1.12.3	Optical Distribution Frame and accessories	lot	1			
1.12.4	IP-PBX telephony system, including appropriate telephone sets	lot	1			
1.12.5	All other necessary cubicles, software, equipment and materials to complete the supply and the installation	lot	1			
1.13	**Metering**					
1.13.1	Meter for 220kV OHL Main & Control	set	2			
1.13.2	Meter for 220/132/33 kV autotransformers (220 kV side and 132 kV side) Main & Control	set	4			
1.13.3	Meter for auxiliary transformers Main & Control	set	2			

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
Schedule No. IV: Installation and Other Services						
Item	**Description**	**Unit**	**Quantity**	**Unit Price Inland Transportation**	**Unit Price Installation and other Services**	**Total Price**
				(NPR)	**(NPR)**	**(NPR)**
			1	2	3	4=1x(2+3)
1.13.4	Communication equipment (Ethernet Switches / Patch Panels / FOs / Cables etc..)	lot	1			
1.13.5	GPRS-GSM communication device	set	1			
1.13.6	Cabinet	lot	1			
1.13.7	Notebook PC including related software for local access for meter reading	set	1			
1.13.8	All other necessary, software, equipment and materials to complete the supply and the installation	lot	1			
1.14	**Power and Control Cables**					
1.14.1	33 kV Cables, sealing ends, terminals and accessories for33kV auxiliary system including accessories	lot	1			
1.14.2	LV Power and Control cables and accessories for auxiliary supply, protection, control, metering including accessories	lot	1			
1.14.3	All other necessary equipment and materials to complete the supply and the installation	lot	1			
1.15	**Earthing and lightning protection systems**	lot	1			
1.16	**Lighting and small power system**	lot	1			
1.17	**Fire Protection system**					
1.17.1	Fire detection system	lot	1			
1.17.2	Portable fire extinguishers	lot	1			
1.17.3	**Fire fighting system**					
1.17.3.1	Containerised fire fighting pump system	lot	1			
1.17.3.2	Fire fighting water tank	lot	1			
1.17.3.3	Fire fighting water supply pump with well	lot	1			
1.17.3.4	Transformer deluge systems for autotransformers	set	7			
1.17.3.5	Fire hydrant network and interconnection piping	lot	1			
1.17.3.6	All accessories necessary for the satisfactory operation of the system but which are not separately listed	lot	1			
1.18	**CCTV system**					
1.18.1	Central unit	set	1			
1.18.2	Control panel	set	1			
1.18.3	Monitor	set	2			
1.18.4	Indoor Camera	lot	1			
1.18.5	Outdoor Camera	lot	1			
1.18.6	All other necessary equipment and materials to complete the extension	lot	1			
1.19	**Civil Works**					
1.19.1	**Site Development Works**	lot	1			
1.19.1.1	General Site Development works	lot	1			
1.19.1.2	Removal and disposal of existing building	lot	1			
1.19.2	**Site installation and temporary works**	lot	1			
1.19.3	**Temporary Site Facilities**					
1.19.3.1	Temporary site facilities and accommodations, including office containers, sanitary containers, rest rooms, etc., for Contractor's own staff	lot	1			
1.19.3.2	Office container for Employer / Engineer	lot	1			
1.19.4	**Buildings**					
1.19.4.1	220 kV GIS Building	lot	1			
1.19.4.2	Overhead travelling crane in 220kV GIS room	unit	1			
1.19.4.3	Ventilation system for 220kV GIS room	lot	1			
1.19.4.4	Control Building	lot	1			
1.19.4.5	Airconditioning and ventilation for Control Building	lot	1			
1.19.4.6	Storage shelter	lot	1			
1.19.4.7	Furniture as defined in VII-6 Technical Requirements Civil Works	lot	1			
1.19.5	**Transformer Foundations**					
1.19.5.1	220/132/33 kV 100 MVA single phase auto-transformer foundations with oil catch and pits and fire separation walls for seven (7) transformers	lot	1			
1.19.5.2	Auxiliary transformer foundations with sunshade and oil catch pits for two (2) transformers	lot	1			
1.19.5.3	Common oil collection pit with oil separator	lot	1			
1.19.6	**Outdoor foundations - HV equipment**					
1.19.6.1	220 kV gantry foundations	lot	1			
1.19.6.2	220 kV AIS equipment foundations for voltage transformers and surge arrestors	lot	1			
1.19.6.3	220 kV GIB and SF6/air termination foundations	lot	1			
1.19.6.4	132 kV gantry foundations	lot	1			
1.19.6.5	132 kV AIS AIS equipment foundations for switchgear extension	lot	1			
1.19.6.6	132 kV GIB and SF6/air termination foundations	lot	1			
1.19.7	**Outdoor foundations - other equipment**					
1.19.7.1	Foundation for the diesel generator and fuel storage	lot	1			
1.19.7.2	Foundation for the containerised fire fighting pump system	lot	1			

Substation Package B						
Kreditanstalt für Wiederaufbau (KfW)						
Nepal Electricity Authority (NEA)						
Schedule No. IV: Installation and Other Services						
Item	**Description**	**Unit**	**Quantity**	**Unit Price Inland Transportation**	**Unit Price Installation and other Services**	**Total Price**
				(NPR)	**(NPR)**	**(NPR)**
			1	2	3	4=1x(2+3)
1.19.7.3	Foundation for the fire water tank	lot	1			
1.19.8	**Channels, ducts etc. for:**					
1.19.8.1	33 kV power cables from 220/132/33 kV autotransformers to 33 kV switchgear	lot	1			
1.19.8.2	33 kV power cables from 33 kV switchgear to auxiliary transformers	lot	1			
1.19.8.3	LV power and control cables from 220 kV GIS building to autotransformer and outdoor equipment	lot	1			
1.19.8.4	LV power and control cables from 220 kV GIS building to existing132 kV switchyard and control building	lot	1			
1.19.9	Roads, paving and gravel bed surfacing					
1.19.10	Site Preparation, leveling and compacting					
1.19.11	Water supply system					
1.19.11.1	Water treatment plant	lot	1			
1.19.11.2	Internal water supply system	lot	1			
1.19.12	Drainage and sewage systems					
1.19.12.1	Storm water drainage system	lot	1			
1.19.12.2	Sanitary sewage drainage system	lot	1			
1.19.13	Landscaping	lot	1			
1.19.14	Fencing and gates	lot	1			
1.20	**Communication and Visibility**	lot	1			
2	**Construction of 220/132/33/11 kV substation in Damauli**					
2.1	**220 kV Gas Insulated Switchgear**					
2.1.1	OHL Bays with GIB and SF6/air bushings (D06, D07, D08, D13, D14, D15)	set	6			
2.1.2	Local control panel with bay cabling for feeder (D06, D07, D08, D13, D14, D15)	set	6			
2.1.3	220/132kV Transformer Bay with GIB and SF6/air bushings (D09 and D12)	set	2			
2.1.4	Local control panel with bay cabling for feeder (D09 and D12)	set	2			
2.1.5	Bus Coupler Bays (D05, D16)	set	2			
2.1.6	Local control panel with bay cabling for feeder (D05, D16)	set	2			
2.1.7	Measuring Bays ((D10) and (D11))	set	2			
2.1.8	Busbar Sectionalizers (D10, D11)	set	2			
2.1.9	Local control panel with bay cabling for feeder D10 and D11, including cable connections to bus bar measuring and bus bar earthing	set	2			
2.1.10	Online switchgear monitoring system for all 6 bays, including the relevant software and integration in the SCMS.	lot	1			
2.1.11	PD UHF measuring system for periodical measurement on site	lot	1			
2.1.12	GIS steel supports for all bays and for GIB's, including wall bushings (material from GIS manufacturer for closing the wall openings)	lot	1			
2.1.13	Wall boards as specified (typical bay sections, single line diagram and gas compartment plan, gas density rules, gas temperature pressure curves etc.)	lot	1			
2.1.14	Key box including specified labelled keys and pad locks for 220kV GIS	lot	1			
2.1.15	All other necessary equipment and materials to complete the supply and the installation	lot	1			
2.2	**220 kV AIS Equipment**					
2.2.1	220kV OHL surge arresters	unit	18			
2.2.2	220kV capacitive voltage transformers	unit	18			
2.2.3	220 kV OHL gantry	lot	1			
2.2.4	220 kV insulators and fittings	lot	1			
2.2.5	All other necessary equipment and materials to complete the supply and the installation	lot	1			
2.3	**132 kV Gas Insulated Switchgear**					
2.3.1	220/132kV Transformer Bays with GIB and SF6/air bushings (E02, E06)	set	2			
2.3.2	Local control panel with bay cabling for feeder E02, E06	set	2			
2.3.3	OHL Bays with GIB and SF6/air bushings (E03, E07)	set	2			
2.3.4	Local control panel with bay cabling for feeder E03, E07	set	2			
2.3.5	132/33kV Transformer Bay with cable conections (E01, E05)	set	2			
2.3.6	Local control panel with bay cabling for feeder E01, E05	set	2			
2.3.7	Measuring Bay (E04)	set	1			
2.3.8	Bus Coupler E04	set	1			
2.3.9	Local control panel with bay cabling for feeder E04 and (E04), including cable connections to bus bar measuring and bus bar earthing	set	1			
2.3.10	Online switchgear monitoring system for all bays, including the relevant software and integration in the SCMS.	lot	1			

Substation Package B						
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				(NPR)	**(NPR)**	**(NPR)**
			1	2	3	4=1x(2+3)
2.3.11	PD UHF measuring system for periodical measurement on site	lot	1			
2.3.12	GIS steel supports for all bays and for GIB's, including wall bushings (material from GIS manufacturer for closing the wall openings)	lot	1			
2.3.13	Wall boards as specified (typical bay sections, single line diagram and gas compartment plan, gas density rules, gas temperature pressure curves etc.)	lot	1			
2.3.14	Key box including specified labelled keys and pad locks for 132kV GIS	lot	1			
2.3.15	All other necessary equipment and materials to complete the supply and the installation	lot	1			
2.4	**132 kV AIS Equipment**					
2.4.1	132 kV OHL surge arresters	unit	6			
2.4.2	132 kV capacitive voltage transformers	unit	6			
2.4.3	132 kV OHL gantry	lot	1			
2.4.4	132 kV insulators and fittings	lot	1			
2.4.5	All other necessary equipment and materials to complete the supply and the installation	lot	1			
2.5	**Power Transformers**					
2.5.1	**220/132 Power Transformer**					
2.5.1.1	Three-phase power transformer 220/132 kV 50/63 MVA, equipped with on-load tap changer	unit	2			
2.5.1.2	Line surge arresters for the primary (220 kV) side	unit	6			
2.5.1.3	Line surge arresters for the secondary (132 kV) side	unit	6			
2.5.1.4	Automatic voltage regulator, including the relevant software and integration in the SCMS	set	2			
2.5.1.5	All other necessary equipment and materials to complete the supply and the installation	lot	1			
2.5.2	**132/33 kV Power Transformer**					
2.5.2.1	Three-phase power transformer 132/33kV 24/30 MVA, equipped with on-load tap changer	unit	2			
2.5.2.2	Line surge arresters for the secondary (132 kV) side	unit	6			
2.5.2.3	Line surge arresters for the secondary (33 kV) side	unit	6			
2.5.2.4	Automatic voltage regulator, including the relevant software and integration in the SCMS	set	2			
2.5.2.5	All other necessary equipment and materials to complete the supply and the installation	lot	1			
2.5.3	**33/11 kV Power Transformer**					
2.5.3.1	Three-phase power transformer 33/11kV 6/8 MVA, equipped with on-load tap changer	unit	2			
2.5.3.2	Line surge arresters for the secondary (33 kV) side	unit	6			
2.5.3.3	Line surge arresters for the secondary (11 kV) side	unit	6			
2.5.3.4	Automatic voltage regulator, including the relevant software and integration in the SCMS	set	2			
2.5.3.5	All other necessary equipment and materials to complete the supply and the installation	lot	1			
2.6	**MV Metal Clad AIS Switchgear**					
2.6.1	**33 kV Switchgear**					
2.6.1.1	Incomers for 132/33kV transformer connection (J02, J11)	unit	2			
2.6.1.2	Outgoing feeders (J04, J10)	unit	2			
2.6.1.3	Outgoing feeder 33/11 kV transformer (J03, J12)	unit	2			
2.6.1.4	Outgoing feeders to auxiliary transformer (J05, J09)	unit	1			
2.6.1.5	Bus tie (J07)	unit	1			
2.6.1.6	Riser measurement panel (J08)	unit	1			
2.6.1.7	Measurement panel (J06)	unit	1			
2.6.1.8	All other necessary equipment, accessories and materials to complete the supply and the installation	lot	1			
2.6.2	**11 kV Switchgear**					
2.6.2.1	Incomers for 33/11kV transformer connection (K03, K08)	unit	2			
2.6.2.2	Outgoing feeders (K04, K05, K09, K11, K12)	unit	5			
2.6.2.3	Bus tie (K07)	unit	1			
2.6.2.4	Riser measurement panel (K06)	unit	1			
2.6.2.5	Measurement panel (K10)	unit	1			
2.6.2.6	All other necessary equipment, accessories and materials to complete the supply and the installation	lot	1			
2.7	**Auxiliary Transformers**					
2.7.1	Three-phase auxiliary transformers 33/0.4 kV, hermetically sealed type with off load tap changer, each of minimum 630 kVA	unit	2			
2.7.2	Tank mounted surge arresters for the primary (33 kV) side.	unit	6			
2.7.3	All other necessary equipment and materials to complete the supply and the installation	lot	1			
2.8	**LV Auxiliary Power Supply System**					
2.8.1	0.4 kV main switchgear, metal-clad type	set	1			

Substation Package B
Kreditanstalt für Wiederaufbau (KfW)
Nepal Electricity Authority (NEA)
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				(NPR)	(NPR)	(NPR)
			1	2	3	4=1x(2+3)
2.8.2	220 V DC switchgear with two bus sections	set	1			
2.8.3	220 V battery chargers	set	2			
2.8.4	220 V DC batteries of Ni-Cd type, each with a minimum capacity of 600 Ah (10h discharge rate)	set	2			
2.8.5	48 V DC switchgear with two bus sections	set	1			
2.8.6	48 V battery chargers	set	2			
2.8.7	48 V DC batteries of Ni-Cd type, each with a minimum capacity of 150 Ah	set	2			
2.8.8	230 V AC UPS System	set	2			
2.8.9	All other necessary equipment and materials to complete the supply and the installation	lot	1			
2.9	**Diesel generator unit (DGU)**					
2.9.1	Diesel generator unit, minimum of 100 kVA, in a prefabricated container equipped with fire-detection system and exhaust gas evacuation system including fuel tank	set	1			
2.9.2	All other necessary equipment and materials to complete the supply and the installation	lot	1			
2.10	**Protection & Control**					
2.10.1	220 kV OHL Protection Terminals and BCU (D06, D07, D08, D13, D14, D15)	set	6			
2.10.2	220kV Bus-sectionaliser and Busbar protection and BCU (D10, D11)	set	2			
2.10.3	220kV Bus-coupler and Busbar protection (D05, D16)	set	2			
2.10.4	50/63 MVA 220/132/11 kV Transformer 220 kV side protection and BCU (D09, D12)	set	2			
2.10.5	50/63 MVA 220/132/11 kV Transformer 132 kV side protection and BCU (E02, E06)	set	2			
2.10.6	132 kV OHL Protection Terminals and BCU (E03, E07)	set	2			
2.10.7	132kV Bus-coupler and Busbar protections and BCU (E04)	set	1			
2.10.8	132/33kV 24/30 MVA Transformer feeder protection 132 kV side and BCU (E01, E05)	set	2			
2.10.9	132/33kV 24/30 MVA Transformer feeder bay control and protection (BCPU) 33 kV side (J02, J09) (installed in 33 kV switchgear)	set	2			
2.10.10	33kV Bus-coupler bay control and protection (BCPU) (J07) (installed in 33 kV switchgear)	set	1			
2.10.11	33kV Feeder bay control and protection (BCPU) (J04, J08)	set	2			
2.10.12	33/11kV 8/10MVA Transformer feeder bay control and protection (BCPU) 33 kV side (J03, J10) (installed in 33 kV switchgear)	set	2			
2.10.13	33/11kV 8/10MVA Transformer feeder protection 11 kV side (K03, K08) (installed in 11 kV switchgear)	set	2			
2.10.14	11kV Feeder bay control and protection (BCPU) (K04, K05, K11, K12, K13, K14) (installed in 11 kV switchgear)	set	5			
2.10.15	11kV Auxiliary Transformer Feeder bay control and protection (BCPU) (K06, K10) (installed in 11 kV switchgear)	set	2			
2.10.16	11kV Bus-coupler protection (K07)	set	1			
2.10.17	All other necessary equipment and materials to complete the supply and the installation	lot	1			
2.11	**Synchrophasor Measurement Unit (PMU)** for monitoring voltage and current as defined in the Scope, including software, documentation, cubicles, accessories	set	1			
2.12	**SCADA and SCMS**					
2.12.1	SCADA and SCMS system for new 220/132/33/11 kV Substation including all necessary cabling, cubicles, equipment and materials to complete the supply and the installation	lot	1			
2.12.2	Equipment and material for interfacing with NLDC/ECC including all necessary cabling, cubicles, equipment and materials to complete the supply and the installation	lot	1			
2.12.3	Equipment and material for interfacing with future New Damauli 400 kV Substation including all necessary cabling, cubicles, equipment and materials to complete the supply and the installation	lot	1			
2.13	**Telecommunication**					
2.13.1	SDH Equipment SDH node for FOC connections of new 220 kV GIS Lekhnath Substation, to Tanahu HPP, 220 kV Bharatpur Substation, Old Damauli and 132 kV Bharatpur.	lot	1			
2.13.2	Fibre optical cables, including approach cable from splicing box to SDH equipment and patch cords	lot	1			
2.13.3	Optical Distribution Frame and accessories	lot	1			

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				(NPR)	(NPR)	(NPR)
			1	2	3	4=1x(2+3)
2.13.4	IP-PBX telephony system, including appropriate telephone sets	lot	1			
2.13.5	All other necessary cubicles, software, equipment and materials to complete the supply and the installation	lot	1			
2.14	**Metering**					
2.14.1	Meter for 220kV OHL Main & Control	set	6			
2.14.2	Meter for 132 OHL Main & Control	set	2			
2.14.3	Meter for 220/132 kV Transformers, (220 kV side and 132 kV side), Main & Control	set	2			
2.14.4	Meter for 132/33 kV Transformers, 132 kV side and 33 kV side), Main & Control	set	2			
2.14.5	Meter for 33/11 kV Transformers, (33 kV side and 11 kV side), Main & Control	set	2			
2.14.6	Meter for 33 kV Feeders Main & Control	set	2			
2.14.7	Meter for 11 kV Feeders Main & Control	set	7			
2.14.8	Meter for auxiliary transformers Main & Control	set	2			
2.14.9	Communication equipment (Ethernet Switches / Patch Panels / FOs / Cables etc..)	lot	1			
2.14.10	GPRS-GSM communication device	lot	1			
2.14.11	Cabinet	lot	1			
2.14.12	Notebook PC including related software for local access for meter reading	set	1			
2.14.13	All other necessary, software, equipment and materials to complete the supply and the installation	lot	1			
2.15	**Power and Control Cables**					
2.15.1	HV cable systems comprising 132 kV XLPE cables for the connection between the secondary windings of 220/132 kV transformers and the 132 kV switchgear	lot	1			
2.15.2	MV cable systems comprising 33 kV XLPE cables for the connection between secondary windings of 132/33 kV transformers and 33 kV switchgear	lot	1			
2.15.3	MV cable systems comprising 33 kV XLPE cables for the connection between 33 kV switchgear and 33/11 kV transformers	lot	1			
2.15.4	MV cable systems comprising 33 kV XLPE cables for the connection between 33kV switchgear and auxiliary transformers	lot	1			
2.15.5	MV cable systems comprising 11 kV XLPE cablesfor the connection between secondary windings of 33/11 kV transformers and 11 kV switchgear	lot	1			
2.15.6	MV cable systems comprising 11 kV XLPE cables for the connection of three 11 kV feeders between between 11 kV switchgear and distribution OHL pole location on the north side of the substation towards the river	lot	1			
2.15.7	LV Power and Control cables and accessories for auxiliary supply, protection, control, metering including accessories	lot	1			
2.15.8	All other necessary equipment and materials to complete the supply and the installation	lot	1			
2.16	**Earthing and lightning protection systems**	lot	1			
2.17	**Lighting and small power system**	lot	1			
2.18	**Fire Protection system**					
2.18.1	Fire detection system	lot	1			
2.18.2	Portable fire extinguishers	lot	1			
2.18.3	**Fire fighting system**					
2.18.3.1	Containerised fire fighting pump system	lot	1			
2.18.3.2	Fire fighting water tank	lot	1			
2.18.3.3	Fire fighting water supply pump with well	lot	1			
2.18.3.4	Transformer deluge systems for autotransformers	set	6			
2.18.3.5	Fire hydrant network and interconnection piping	lot	1			
2.18.3.6	All accessories necessary for the satisfactory operation of the system but which are not separately listed	lot	1			
2.19	**CCTV system**					
2.19.1	Central unit	set	1			
2.19.2	Control panel	set	1			
2.19.3	Monitor	set	2			
2.19.4	Indoor Camera	lot	1			
2.19.5	Outdoor Camera	lot	1			
2.19.6	All other necessary equipment and materials to complete the extension	lot	1			

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2.20	**Civil Works**					
2.20.1	**Site Development Works**	lot	1			
2.20.1.1	**Phase 1**					
2.20.1.1.1	General Site Development works	lot	1			
2.20.1.1.2	Temporary bridge from existing access road over Chabdi river for temporary access during site development works and enhancement of xisting access road	lot	1			
2.20.1.1.3	Removal and disposal of existing building	lot	1			
2.20.1.1.4	External drainage collector 1 (hill side south of substation)	lot	1			
2.20.1.1.5	External drainage collector 2 (400 kV side east of substation)	lot	1			
2.20.1.1.6	Development of the 220kV substation platform (excavation, filling and compaction, flood protection works). The temporary access road and temporary bridge may be used for these works.	lot	1			
2.20.1.1.7	Permanent access road, including related rainwater protection works	lot	1			
2.20.1.1.8	Inner fencing surrounding the substation area with main access gate and maintenance access gates to area between the 220kV substation platform and the riverbed	lot	1			
2.20.1.1.9	Access road (3 m wide) from maintenance access gates to area between the 220kV substation platform and the riverbed	lot	1			
2.20.1.2	**Phase 2**					
2.20.1.2.1	Removal and disposal of temporary access bridge	lot	1			
2.20.1.2.2	Levelling of the area between the 220kV substation platform and the riverbed (no filling required for the area between the 220kV substation platform and the riverbed) and development of a drainage system to drain water from this area	lot	1			
2.20.1.2.3	Development flood retaining wall and external chain link fence	lot	1			
2.20.1.2.4	Flood retaining wall north-west, adjacent to the riverbed	lot	1			
2.20.1.2.5	Low wall along external drainage collector on south side	lot	1			
2.20.1.2.6	Low wall along east side of substation platform (towards future 400 kV substation	lot	1			
2.20.2	**Site installation and temporary works**	lot	1			
2.20.3	**Temporary Site Facilities**					
2.20.3.1	Temporary site facilities and accommodations, including office containers, sanitary containers, rest rooms, etc., for Contractor's own staff	lot	1			
2.20.3.2	Office container for Employer / Engineer	lot	1			
2.20.4	**Buildings**					
2.20.4.1	220 kV GIS Building	lot	1			
2.20.4.2	Overhead travelling crane for 220kV GIS room	unit	1			
2.20.4.3	Ventilation System for 220kV GIS room	unit	1			
2.20.4.4	132 kV GIS Building	lot	1			
2.20.4.5	Overhead travelling crane for 132kV GIS room	unit	1			
2.20.4.6	Ventilation System for 132kV GIS room	unit	1			
2.20.4.7	Control Building	lot	1			
2.20.4.8	Airconditioning and Ventilatiopn for Control Building	lot	1			
2.20.4.9	Separate strore building	lot	1			
2.20.4.10	Guard house	lot	1			
2.20.4.11	Airconditioning for Guard House	lot	1			
2.20.4.12	Furniture as defined in VII-6 Technical Requirements Civil Works	lot	1			
2.20.5	**Transformer Foundations**					
2.20.5.1	220/132 kV 50/63 MVA power transformer foundations with oil catch and pits and fire separation walls for two (2) transformers	lot	1			
2.20.5.2	132/33 kV 24/30 MVA power transformer foundationswith oil catch and pits and fire separation walls for two (2) transformers	lot	1			
2.20.5.3	33/11 kV 8/10 MVA power transformer foundations with oil catch and pits and fire separation walls for two (2) transformers	lot	1			
2.20.5.4	Auxiliary transformer foundations with sunshade and oil catch pits for two (2) transformers	lot	1			
2.20.5.5	Common oil collection pit with oil separator	lot	1			
2.20.6	**Outdoor foundations - HV equipment**					
2.20.6.1	220 kV gantry foundations	lot	1			
2.20.6.2	220 kV AIS equipment foundations for voltage transformers and surge arrestors	lot	1			
2.20.6.3	220 kV GIB and SF6/air termination foundations	lot	1			
2.20.6.4	132 kV gantry foundations	lot	1			
2.20.6.5	132 kV AIS equipment foundations for voltage transformers and surge arrestors	lot	1			
2.20.6.6	132 kV GIB and SF6/air termination foundations	lot	1			
2.20.7	**Outdoor foundations - other equipment**					
2.20.7.1	Foundation for the diesel generator and fuel storage	lot	1			
2.20.7.2	Foundation for the containerised fire fighting pump system	lot	1			
2.20.7.3	Foundation for the fire water tank	lot	1			

Substation Package B
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				(NPR)	(NPR)	(NPR)
			1	2	3	4=1x(2+3)
2.20.8	**Channels, ducts etc. for:**					
2.20.8.1	220 kV cables from the 220 kV GIS up to the fence towards the future 400 kV Substation	lot	1			
2.20.8.2	220 kV cables from the 220 kV GIS up to the fence towards the future 220 kV gantries	lot	1			
2.20.8.3	132 kV cables from the 220/132 kV transformers to the 132 kV switchgear	lot	1			
2.20.8.4	33 kV cables from 132/33 kV transformers to 33 kV switchgear and from 33 kV switchgear to 33/11 kV transformers	lot	1			
2.20.8.5	33 kV cables from and 33 kV switchgear to auxiliary 33/0.4 kV transformer	lot	1			
2.20.8.6	11 kV power cables from 132/11 kV transformers to 11 kV switchgear	lot	1			
2.20.8.7	11 kV power cables from 11 kV switchgear to auxiliary transformers	lot	1			
2.20.8.8	11 kV outgoing feeder cables between between 11 kV switchgear and distribution OHL pole location on the north side of the substation towards the river	lot	1			
2.20.8.9	33 kV outgoing feeder cables between between 33 kV switchgear and distribution OHL pole location on the north side of the substation towards the river	lot	1			
2.20.8.10	LV power and control cables from 220 kV GIS building to autotransformer and outdoor equipment	lot	1			
2.20.8.11	LV power and control cables from 132 kV GIS building to power transformer and outdoor equipment	lot	1			
2.20.8.12	LV power and control cables from 220 kV GIS building to 132 kV building	lot	1			
2.20.9	Roads, paving and gravel bed surfacing					
2.20.9.1	Concrete roads and surfacing inside subststion as indicated in the Substtation Layout drawing	lot	1			
2.20.9.2	Car Park with roof shade as indicated in the Substtation Layout drawing	lot	1			
2.20.9.3	Crushed rock surfacing inside subststion as indicated in the Substtation Layout drawing	lot	1			
2.20.10	Water supply system					
2.20.10.1	Water treatment plant	lot	1			
2.20.10.2	Internal water supply system	lot	1			
2.20.11	Drainage and sewage systems					
2.20.11.1	The storm water drainage system inside substation area	lot	1			
2.20.11.2	Sanitary sewage drainage system inside substation area	lot	1			
2.20.12	Landscaping	lot	1			
2.20.12.1	Plantations using low to medium-high growing plants and grass along the main roads and buildings, as indicated on the layout drawings	lot	1			
2.21	**Communication and Visibility**	lot	1			
3	**TRAINING OF EMPLOYER'S STAFF**					
3.1	High voltage switchgear	lot	1			
3.2	Medium voltage switchgear	lot	1			
3.3	Auto and power transformers	lot	1			
3.4	LV auxiliary systems	lot	1			
3.5	Protection and control systems	lot	1			
3.6	SCMS	lot	1			
3.7	SCADA	lot	1			
3.8	Telecommunication	lot	1			
3.9	CCTV System	lot	1			
3.10	Fire protection system	lot	1			
	TOTAL (to Schedule No. VI Grand Summary)					
		Name of Bidder:				
		Signature of Bidder:				

Schedule V

ESMMP Requirements

Substation Package B			
Kreditanstalt für Wiederaufbau (KfW)			
Nepal Electricity Authority (NEA)			
Schedule No. V: ESHS Requirements			
Item	**Description**	**Unit**	**Total (NPR)**
1	**ESHS Requirements**		
1.1	Resources allocated to ESHS management as per the ESMP requirements	Lump sum	
1.2	Required tools, equipment, facilities (toilets/cabin/tents/security), and transportation for Archaeological Clerk of Works for any archaeological excavations required	Lump sum	
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	
1.4	Drafting and updating the ESHS documentation, reporting, inspections as per the ESMP requirements	Lump sum	
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	
1.6	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	
1.6.2	- Meals	Lump sum	
1.6.3	- Transport	Lump sum	
1.7	Local recruitment and training management costs	Lump sum	
1.8	Biodiversity studies, surveys and related activites as per ESMP requirements	-	
1.9	Temporary access rights, land take and compensation as per the ESMP requirements	Lump sum	
1.10	Vegetation and tree removal as per ESMP requirements	Lump sum	
1.11	Protection of the biodiversity, adjacent areas, prevention of erosion at work sites and access tracks as per the ESMP requirements	Lump sum	
1.12	Traffic, noise and atmospheric emissions management as per the ESMP requirements	Lump sum	
1.13	Contamination studies, wastewater, waste and hazardous products mangement as per the ESMP requirements	Lump sum	
1.14	Site reinstatement as per the ESMP requirements	Lump sum	
1.15	Other material, equipment or studies not specifically mentioned but deemed necessary based on ESMP requirements	Lump sum	
1.15.1	River training structures	Lump sum	
1.15.2	Culvert for Chaabdi Khola (near substation)	Lump sum	
	TOTAL (to Schedule No. VI Grand Summary)		
		Name of Bidder:	
		Signature of Bidder:	

Schedule VI

Grand Summary

Substation Package B			
Kreditanstalt für Wiederaufbau (KfW)			
Nepal Electricity Authority (NEA)			
Schedule No. VI: Grand Summary			
Schedule	**Description**	**Total**	**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

Substation Package B

Kreditanstalt für Wiederaufbau (KfW)

Nepal Electricity Authority (NEA)

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 = 1 x 2
					Name of Bidder:	
					Signature of Bidder:	

Section V. Eligibility Criteria

Eligibility in KfW-Financed Procurement

1. 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. Bidders/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

1. 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, accepting 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 labour standards, consistent with applicable law and regulations in the country of implementation of the respective Contract and the fundamental conventions of the International Labour Organisation[25] (ILO) and international environmental treaties and;

[25] 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.

(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.