ASSOCIATION OF POWER UTILITIES OF AFRICA (APUA)
AFRICAN NETWORK OF CENTERS OF EXCELLENCE IN ELECTRICITY (ANCEE)

Loan Nº: AfDB Agreement: 2100155029817
NITB Nº: Nº AAO/01/APUA/ANCEE/2020

Standard Bidding Document for Procurement of Plant Design, Supply, and Installation
Procurement of equipment to upgrade facilities and support the expansion of the intake capacity of ANCEE Centers of Training in six (6) lots

Lot 1:
I-1: An educational system for renewable energy.
I-2: A language laboratory.

Lot 2: A real-time simulator of power supply systems and power grids (French).
Lot 3: A real-time simulator of power supply systems and power grids (English).
Lot 4: A smart grid platform with a weather station.
Lot 5: A smart grid laboratory and SCADA laboratory.
Lot 6: A photovoltaic platform

February 2020
Foreword

The Bank’s procurement rules stipulates that bidders may send copies of their communications with the Borrowers to the Bank or write to the Bank directly when, Borrowers do not respond promptly, any questions on any issues regarding the implementation of Bank funded projects, or when the communication is a complaint against the Borrower. In this regard, if a bidder wishes to protest against a decision made by a Borrower or the Bank with regards to the procurement process or wishes to inform the Bank that the Bank’s procurement rules and/or provisions of the bidding documents have not been complied with, an email can be sent to the following address:

Email: procurementcomplaints@afdb.org
Summary Description

The use of this Bidding Document for Procurement of Plant Design, Supply, and Installation and its User’s Guide applies either when a prequalification process has taken place before bidding, or when a prequalification process has not taken place before bidding. A brief description of the parts, sections, and contents is given below.

SBD for Procurement of Plant Design, Supply, and Installation

PART 1 – BIDDING PROCEDURES

Section I: Instructions to Bidders (ITB)

This Section provides relevant information to help Bidders prepare their bids. Information is also provided on the submission, opening, and evaluation of bids and on the award of Contracts. Section I contains provisions that are to be used without modification.

Section II. Bid Data Sheet (BDS)

This Section consists of provisions that are specific to each procurement and that supplement the information or requirements included in Section I, Instructions to Bidders.

Section III. Evaluation and Qualification Criteria

This Section contains the criteria to determine the lowest evaluated bid and the qualifications of the Bidder to perform the contract. Two alternative Sections III, Evaluation and Qualification Criteria are provided to address the possibility of having or not having prequalification of Bidders.

Section IV: Bidding Forms

This Section contains the forms which are to be completed by the Bidder and submitted as part of his Bid

Section V. Eligible Countries

This Section contains information regarding eligible countries.
PART 2 – EMPLOYER’S REQUIREMENTS

Section VI. Requirements

This Section contains the Specification, the Drawings, and supplementary information that describe the Plant and Installation Services to be procured.

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VII. General Conditions (GC)

This Section contains the general clauses to be applied in all contracts. The text of the clauses in this Section shall not be modified.

Section VIII. Particular Conditions (PC)

This Section contains clauses specific to each contract. The contents of this Section modify or supplement the General Conditions and shall be prepared by the Employer.

Section IX: Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.
Bidding Document for Procurement of Plant
Design, Supply, and Installation

Procurement of:

Lot 1:
I-1: An educational system for renewable energy.
I-2: A language laboratory.
Lot 2: A real-time simulator of power supply systems and power grids (French).
Lot 3: A real-time simulator of power supply systems and power grids (English).
Lot 4: A smart grid platform with a weather station.
Lot 5: A smart grid laboratory.
Lot 6: A photovoltaic platform.

Issued on: March 09, 2020

ICB No: AAO/01/APUA/ANCEE/2020

Employer: Association of Power Utilities of Africa

Country: Multi Country
Preface

This Bidding Document for Procurement of Plant Design, Supply, and Installation has been prepared by ANCEE Coordination Unit and is based on the Standard Bidding Document for Procurement of Plant Design, Supply, and Installation issued by the African Development Bank, dated September 2010 revised on December 2017.

The Bidding Document for Procurement of Plant Design, Supply, and Installation reflects the structure and the provisions of the Master Document for the Procurement of Plant Design, Supply, and Installation, prepared by Multilateral Development Banks and International Financing Institutions, except where specific considerations within the African Development Bank have required a change.
# Bidding Document

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PART 1 – Bidding Procedures
OPTION A: Single Stage Bidding
Section I. Instructions to Bidders

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Section I. Instructions to Bidders

A. General

1. Scope of Bid

1.1 The Employer indicated in Section II, Bid Data Sheet (BDS) issues this Bidding Document for the procurement of Plant and Installation Services, as specified in Section VI, Requirements. The name, identification, and number of lots are provided in the BDS.

1.2 Unless otherwise stated, throughout this Bidding Document definitions and interpretations shall be as prescribed in Section VII, General Conditions.

2. Source of Funds

2.1 The Borrower or Recipient (hereinafter called “Borrower”) indicated in the BDS has applied for or received financing (hereinafter called “funds”) from the African Development Bank\(^1\) (hereinafter called “the Bank”) toward the cost of the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which this Bidding Document is issued.

2.2 Payments by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the financing agreement between the Borrower and the Bank (hereinafter called the Financing Agreement), and will be subject in all respects to the terms and conditions of that Financing Agreement. No party other than the Borrower shall derive any rights from the Financing Agreement or have any claim to the funds.

3. Fraud and Corruption

3.1 It is the Bank’s policy to require that Borrowers (including beneficiaries of Bank Financing), as well as Bidders, Suppliers, and contractors, and their agents (whether declared or not), subcontractors, sub-consultants, service providers or suppliers, and any personnel thereof, under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts\(^2\). In pursuance of this policy, the Bank:

(a) defines, for the purposes of this provision, the terms set forth below as follows:

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\(^1\) The specific financing institution shall be as stipulated in the BDS.
\(^2\) In this context, any action to influence the procurement process or contract execution for undue advantage is improper.
(i) “Corrupt Practice” is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party\(^3\);

(ii) “fraudulent practice” is any act or omission, including a misrepresentation that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;

(iii) “Collusive Practice” is an arrangement between two or more parties\(^4\), designed to achieve an improper purpose, including to influence improperly the actions of another party; and

(iv) “Coercive practice” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party\(^5\);

(v) “Obstructive practice” is

\(v.1\) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or

\(v.2\) acts intended to materially impede the exercise of the Bank’s inspection and audit rights provided for under paragraph 3.1(e) below.

(b) will reject a proposal for award if it determines that the Bidder recommended for award, or any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/or their employees has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the Contract in question;

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\(^3\) For the purpose of this sub-paragraph, “another party” refers to a public official acting in relation to the procurement process or contract execution. In this context, “public official” includes Bank staff and employees of other organizations taking or reviewing procurement decisions.

\(^4\) For the purpose of this sub-paragraph, “parties” refers to participants in the procurement process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish bid prices at artificial, non-competitive levels, or are privy to each other’s bid prices or other conditions.

\(^5\) For the purpose of this sub-paragraph, “party” refers to a participant in the procurement process or contract execution.
(c) will declare misprocurement and cancel the portion of the Financing allocated to a contract if it determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of such Financing engaged in corrupt, fraudulent, collusive, coercive or obstructive practices during the procurement or the implementation of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;

(d) will sanction a firm or individual, at any time, in accordance with the prevailing Bank’s sanctions procedures including by publicly declaring such firm or individual ineligible to bid for, or to be awarded Bank-financed contracts either indefinitely or for a stated period of time, (i) to be awarded a Bank-financed contract; (ii) to be a nominated sub-contractor, consultant, supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and

(e) will require that a clause be included in Bidding Documents and in contracts financed by the Bank, requiring bidders, suppliers and contractors and their sub-contractors, agents, personnel, consultants, service providers, or suppliers to permit the Bank to inspect their accounts and records and other documents relating to the submission of bids and contract performance and to have them audited by auditors appointed by the Bank.

3.2 Furthermore, Bidders shall be aware of the provisions stated in Section VII, General Conditions.

4. Eligible Bidders

4.1 A Bidder may be a natural person, private entity, government-owned entity—subject to ITB 4.5—or any combination of such

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6 A firm or an individual may be declared ineligible to be awarded a Bank financed contract: (i) upon completion of the Bank’s sanctions proceedings as per its sanctions procedures, including, inter alia, cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks, or otherwise decided by the Bank; and through the application of the Proposal for the Implementation of a Sanctions Process within the African Development Bank Group; and (ii) as a result of temporary suspension or early temporary suspension in connection with an on-going sanction proceeding. See footnote 18 and paragraph 9 of Appendix 1 of the Rules and Procedures for Procurement of Goods and Works.

7 A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding documents) is one which has either been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirement for the particular bid; or (ii) appointed by the Borrower. “
entities supported by a letter of intent to enter into an agreement or under an existing agreement in the form of a joint venture, consortium, or association (JVCA). In the case of a joint venture, consortium, or association:

\( a) \) unless otherwise specified in the BDS, all partners shall be jointly and severally liable, and

\( b) \) the JVCA shall nominate a Representative who shall have the authority to conduct all businesses for and on behalf of any and all the partners of the JVCA during the bidding process and, in the event the JVCA is awarded the Contract, during contract execution.

4.2 A Bidder, and all parties constituting the Bidder, shall have the nationality of an eligible country, in accordance with the Bank’s Rules and Procedures for Procurement of Goods and Works, and as listed in Section V, Eligible Countries.\(^8\) A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, incorporated, or registered and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including Related Services.

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

(a) they have controlling partners in common; or

(b) they receive or have received any direct or indirect subsidy from any of them; or

(c) they have the same legal representative for purposes of this bid; or

(d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or

(e) a Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which it is

\(^8\) Including eligibility criteria for participation in the supply of goods, works and related services.
involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one bid; or

(f) a Bidder participated as a consultant in the preparation of Section VI, Requirements that are the subject of the bid; or

(g) a Bidder or any of its affiliates has been hired, or is proposed to be hired, by the Employer or the Borrower for the supervision of the contract.

4.4 A Bidder that is under a declaration of ineligibility by the Bank in accordance with ITB Clause 3, at the date of the deadline for bid submission or thereafter, shall be disqualified.

4.5 Government-owned entities in the Borrower’s country shall be eligible only if they can establish that they (i) are legally and financially autonomous, (ii) operate under the principles of commercial law, and (iii) are not dependent agencies of the Employer or the Borrower.

4.6 Bidders shall not be under execution of a Bid–Securing Declaration in the Employer’s Country.

4.7 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.

4.8 Firms from an eligible country shall be excluded if:

(a) as a matter of law or official regulation, the Borrower’s country prohibits commercial relations with that country; or

(b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower’s country prohibits any import of Goods from that country or any payments to persons or entities in that country.

4.9 In case a prequalification process has been conducted prior to the bidding process, this bidding is open only to prequalified Bidders.

4.10 A firm sanctioned by the Bank in accordance with the above ITB Clause 3.1 (d), or in accordance with the Bank’s policies on anti-corruption and fraud and Bank’s sanctions procedures, shall be

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9 See the Proposal for the Implementation of a Sanctions Process within the African Development Bank Group and the Bank’s Whistleblowing and Complaints Handling Policy. The Bank’s sanctions procedures are publicly disclosed on the Bank’s external website.”
ineligible to be awarded a Bank-financed contract, or to benefit from a Bank-financed contract, financially or in any other manner, during the period of time determined by the Bank.

5. Eligible Goods and Related Services

5.1 All goods and related services to be supplied under the Contract and financed by the Bank, shall have as their country of origin an eligible country of the Bank in accordance with the Bank’s Rules and Procedures for Procurement of Goods and Works, and as listed in Section V, Eligible Countries.

5.2 For purposes of this Clause, the term “Goods” includes commodities, raw material, machinery, equipment, and industrial plants; and “Related Services” includes services such as insurance, transportation, installation, commissioning, training, and initial maintenance.

5.3 The term “country of origin” means the country where the Goods have been mined, grown, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its imported components.

5.4 The nationality of the firm that produces, assembles, distributes, or sells the Goods shall not determine their origin.

B. Contents of Bidding Document

6. Sections of Bidding Document

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

PART 1 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. Eligible Countries

PART 2 Employer’s Requirements
- Section VI. Requirements

PART 3 Conditions of Contract and Contract Forms
- Section VII. General Conditions (GC)
- Section VIII. Particular Conditions (PC)
- Section IX. Contract Forms
6.2 The Invitation for Bids issued by the Employer is not part of the Bidding Document.

6.3 The Bidder shall obtain the Bidding Document from the source stated by the Employer in the Invitation for Bids; otherwise the Employer is not responsible for the completeness of the Bidding Document.

6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the bid.

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

7.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the Employer in writing at the Employer’s address indicated in the BDS or raise his enquiries during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer will respond to any request for clarification, provided that such request is received prior to the deadline for submission of bids, within the number of days specified in the BDS. The Employer’s response shall be in writing with copies to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8 and ITB 22.2.

7.2 Where applicable, the Bidder is advised to visit and examine the project site 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 the Requirements. The costs of visiting the site shall be at the Bidder’s own expense.

7.3 Pursuant to ITB 7.2, where the Bidder and any of its personnel or agents have been granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, 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 visit.

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. If so provided for in the BDS, the Employer will organize a site visit.
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 Document in accordance with ITB 6.3. Any modification to the Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting.

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

8. Amendment of Bidding Document

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

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

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

C. Preparation of Bids

9. Cost of Bidding

9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall 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 that language, 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) Letter of Bid;

b) Completed Schedules as provided in Section IV, Bidding Forms;

c) Bid Security or Bid -Securing Declaration, in accordance with ITB 19;

d) at the Bidder’s option, alternative proposals, if permissible, in accordance with ITB 13;

e) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2;

f) documentary evidence establishing the eligibility of the Goods and Related Services offered by the Bidder, in accordance with ITB 17.1;

g) documentary evidence establishing the Bidder’s qualifications in accordance with the requirements of Section III, Evaluation and Qualification Criteria, using the relevant forms furnished in Section IV, Bidding Forms;

h) documentary evidence as specified in the BDS, establishing the conformity of the Plant and Installation Services offered by the Bidder with the Bidding Document, using the relevant forms furnished in Section IV, Bidding Forms;

i) in the case of a bid submitted by a JVCA, JVCA agreement, or letter of intent to enter into a JVCA including a draft agreement, indicating at least the parts of the Requirements to be executed by the respective partners;

j) any other document required in the BDS.
12. Letter of Bid and Price Schedules

12.1 The Bidder shall submit the Letter of Bid using the form furnished in Section IV, Bidding Forms. This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

13. Alternative Bids

13.1 Unless otherwise indicated in the BDS, alternative proposals shall not be considered. If alternative proposals are permitted, their method of evaluation shall be as stipulated in Section III, Evaluation and Qualification Criteria.

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 evaluating different times for completion will be described 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 requirements of the bidding document must first price the Employer’s requirements as described in the bidding document and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the lowest evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.

13.4 When specified in the BDS, Bidders are permitted to submit alternative technical solutions for specified parts of the requirements, and such parts shall be identified in the BDS, as will the method for their evaluation, and described in Section VI, Requirements.

14. Bid Prices and Discounts

14.1 The prices and discounts quoted by the Bidder in the Letter of Bid and in the Price Schedules shall conform to the requirements specified in ITB 14.2.

14.2 Unless otherwise provided in the BDS and the General Conditions (GC), the prices quoted by the Bidder shall be fixed.

14.3 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.

14.4 Depending on the scope of the Contract, the Price Schedules may comprise up to the six (6) schedules listed below. Separate numbered Schedules included in Section IV, Bidding Forms, from those numbered 1-4 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 5), giving the total bid price(s) to be entered in the Letter of Bid.

Schedule No. 1 Plant (including Mandatory Spare Parts) Supplied from Abroad

Schedule No. 2 Plant (including Mandatory Spare Parts) Supplied from within the Employer’s Country

Schedule No. 3 Design Services

Schedule No. 4 Installation Services

Schedule No. 5 Grand Summary (Schedule Nos. 1 to 4)

Schedule No. 6 Recommended Spare Parts

Bidders shall note that the plant and equipment included in Schedule Nos. 1 and 2 above exclude materials used for civil, building and other construction works. All such materials shall be included and priced under Schedule No. 4, Installation Services.

14.5 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. 1):

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. 2):

(i) The price of the plant shall be quoted as per the EXW Incoterms specified in the BDS,

(ii) Sales tax and all other taxes payable in the Purchaser’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. 3).

(d) Installation Services shall be quoted separately (Schedule No. 4) and shall include rates or prices for local transportation to named place of 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. [Note: When the named place of destination is the project site, the transportation costs for Schedule No. 1 items are covered under CIP and therefore will not be stated here. This schedule will cover only for items in Schedule No. 2. If the named place of destination is different from the site of installation (project site), then the transport cost from the named place of destination to project site for Schedule No. 1 shall be also included here.]

(e) Recommended spare parts shall be quoted separately (Schedule 6) as specified in either subparagraph (a) or (b) above in accordance with the origin of the spare parts.

14.6 The current edition of Incoterms, published by the International Chamber of Commerce shall govern.

14.7 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 bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.
14.8 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 corresponding Appendix to the Contract Agreement. 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.

14.9 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 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.

14.10 Bidders wishing to offer any unconditional discount shall specify in their Letter of Bid the offered discounts and the manner in which price discounts will apply.

15. **Currencies of Bid and Payment**

15.1 The currency(ies) of the bid and the currency(ies) for payment shall be as specified in the BDS.

16. **Documents Establishing the Qualifications of the Bidder**

16.1 To establish its qualifications to perform the Contract the Bidder shall provide the information requested in Section IV, Bidding Forms.

16.2 If so required in the BDS, a Bidder shall submit the Manufacturer’s Authorization, using the form included in Section IV, Bidding Forms where the Bidder does not manufacture or produce the Goods it offers to supply.

16.3 If so required in the BDS, a Bidder shall submit evidence that it will be represented by an Agent in the country, equipped and able to carry out the Contractor’s maintenance, repair and spare parts-stocking obligations prescribed in the Conditions of Contract and Requirements, where a Bidder does not conduct business within the Employer’s Country.

17. **Documents Establishing the Eligibility of Plant and**

17.1 To establish the eligibility of the Plant and Installation Services in accordance with ITB Clause 5, Bidders shall complete the forms included in Section IV, Bidding Forms.
18. **Period of Validity of Bids**

18.1 Bids shall remain valid for the period specified in the BDS after the bid submission deadline date prescribed by the Employer, pursuant to ITB 22. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.

18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Employer may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a bid security is requested in accordance with ITB 19, the Bidder granting the request shall also extend the bid security for twenty-eight (28) days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its bid, except as provided in ITB 18.3.

18.3 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 as specified in the request for extension. Bid evaluation shall be based on the Bid Price without taking into consideration the above correction.

19. **Bid Security**

19.1 The Bidder shall furnish as part of its bid, at the option of the Employer, and as stipulated in the BDS, the original of either a Bid-Securing Declaration or a bid security using the relevant form included in Section IV, Bidding Forms. In the case of a bid security, the bid security amount and currency shall be as specified in the BDS.

19.2 A Bid-Securing Declaration shall use the form included in Section IV, Bidding Forms.

19.3 If a bid security is specified pursuant to ITB 19.1, the bid security shall be a demand guarantee in any of the following forms at the Bidder’s option:

(a) an unconditional guarantee issued by a bank or surety;

(b) an irrevocable letter of credit; or

(c) a cashier’s or certified check;

from a reputable source from an eligible country. If the unconditional guarantee is issued by an insurance company or a bonding company located outside the Employer’s Country, the issuer shall have a correspondent financial institution located in the Employer’s Country to make it enforceable. In the case of a
bank guarantee, 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. In either case, the form must include the complete name of the Bidder. The bid security shall be valid for twenty-eight days (28) beyond the original validity period of the bid, or beyond any period of extension if requested under ITB 18.2.

19.4 Pursuant to the option stipulated at ITB 19.1, any bid not accompanied by a substantially responsive bid security or Bid-Securing Declaration shall be rejected by the Employer as non-responsive.

19.5 If a bid security is specified pursuant to ITB 19.1, the bid security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder’s furnishing of the performance security pursuant to ITB 38.

19.6 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.

19.7 The bid security may be forfeited or the Bid-Securing Declaration executed:

(a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder in the Letter of Bid or
(b) if the successful Bidder fails to:
   (i) sign the Contract in accordance with ITB 37; or
   (ii) furnish a performance security in accordance with ITB 38.

19.8 The Bid Security or the Bid Securing Declaration of a JVCA shall be in the name of the JVCA that submits the bid. If the JVCA has not been legally constituted into a legally enforceable JVCA at the time of bidding, the Bid Security or the Bid Securing Declaration shall be in the names of all future partners as named in the letter of intent referred to in ITB 4.1.

19.9 If a Bid-Securing Declaration is executed in accordance with ITB 19.7, the Employer will declare the Bidder ineligible to be awarded a contract by the Employer for the period of time stated in the Form of Bid-Securing Declaration.

20. Format and Signing of Bid

20.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB 11 and clearly mark it “ORIGINAL.” In addition, the Bidder shall submit copies of the
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.

20.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid where entries have been made shall be signed or initialed by the person signing the bid.

20.3 A bid submitted by a JVCA shall comply with the following requirements:

(a) Unless not required in accordance with ITB 4.1 (a), be signed so as to be legally binding on all partners and

(b) Include the Representative’s authorization referred to in ITB 4.1 (b), consisting of a power of attorney signed by those legally authorized to sign on behalf of the JVCA.

20.4 Any amendments, interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the bid.

D. Submission and Opening of Bids

21. Submission, Sealing and Marking of Bids

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

(a) Bidders submitting bids by mail or by hand shall enclose the original and copies of the Bid in separate sealed envelopes. If so permitted in accordance with ITB 13 alternative proposals, and copies thereof, shall also be placed in separate envelopes. The envelopes shall be duly marked as “ORIGINAL,” “ALTERNATIVE,” “ORIGINAL COPY,” and “ALTERNATIVE COPY” These envelopes shall then be enclosed in one single package. The rest of the procedure shall be in accordance with ITB 21.2 and 21.3.

(b) Bidders submitting bids electronically shall follow the electronic bid submission procedures specified in the BDS.
21.2 The inner and outer envelopes shall:

(a) bear the name and address of the Bidder;
(b) be addressed to the Employer in accordance with ITB 22.1;
(c) bear the specific identification of this bidding process pursuant to ITB 1.1; and
(d) bear a warning not to open before the time and date for bid opening.

21.3 If envelopes and packages are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the bid.

22. Deadline for Submission of Bids

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

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

23. Late Bids

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

24. Withdrawal, Substitution, and Modification of Bids

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

(a) prepared and submitted in accordance with ITB 20 and ITB 21 (except that 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 22.
24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.

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

25. Bid Opening

25.1 The Employer shall conduct the bid opening in public, in the presence of Bidders’ designated representatives and anyone who choose to attend, and at the address, date and time specified in the BDS. Any specific electronic bid opening procedures required if electronic bidding is permitted in accordance with ITB 21.1, shall be as specified in the BDS.

25.2 First, envelopes marked “Withdrawal” shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening. Next, envelopes marked “Substitution” shall be opened and read out and exchanged with the corresponding bid being substituted, and the substituted bid shall not be opened, but returned to the Bidder. No bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at bid opening. Envelopes marked “Modification” shall be opened and read out with the corresponding bid. No bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at bid opening. Only bids that are opened and read out at bid opening shall be considered further.

25.3 The Employer shall open all other envelopes one at a time and read out: the name of the Bidder, the Bid Price(s), any discounts and their application methodology, alternative bids, the presence or absence of a bid security or Bid-Securing Declaration; and any other details as the Employer may consider appropriate. Only discounts and alternative bids read out at bid opening shall be considered for evaluation. No bid shall be rejected at bid opening except for late bids, in accordance with ITB 23.1.

25.4 The Employer shall prepare a record of the bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; the Bid Price, per lot if applicable, including any discounts and alternative proposals; and the presence or absence of a bid security or a Bid-Securing Declaration. The Bidders’ representatives who are
present shall be requested to sign the record. The omission of a Bidder’s signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders who submitted bids in time, and posted online when electronic bidding is permitted.

E. Examination of Bids

26. Confidentiality

26.1 Information relating to the evaluation of bids shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.

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

26.3 Notwithstanding ITB 26.1, 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 should do so in writing.

27. Clarification of Bids

27.1 To assist in the examination, evaluation, and comparison of the bids and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its bid, allowing a reasonable time for 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 in the prices or substance 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 29.

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

28. Determination of Responsiveness

28.1 The Employer’s determination of a bid’s responsiveness is to be based on the contents of the bid itself, as defined in ITB 11.

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

(a) “Deviation” is a departure from the requirements specified in the Bidding Document;
(b) “Reservation” is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and

(c) “Omission” is the failure to submit part or all of the information or documentation required in the Bidding Document.

28.3 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 Requirements as specified in Section VI; or

(ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer’s rights or the Bidder’s obligations under the proposed Contract; or

(b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.

28.4 The Employer shall examine the technical aspects of the bid in particular, to confirm that all requirements of Section VI have been met without any material deviation, reservation, or omission.

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

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

28.7 Provided that a 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 bid. Failure of the Bidder to comply with the request may result in the rejection of its bid.

28.8 Provided that a 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 the nonconforming item or component. The adjustment shall be made
using the methodology indicated in Section III, Evaluation and Qualification Criteria.

**F. Bid Evaluation and Comparison**

| 29. Correction of Arithmetical Errors | 29.1 The Employer shall use the criteria and methodologies indicated in Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted. |
| 29.2 Provided that the bid is substantially responsive, the Employer shall correct arithmetical errors as indicated in Section III, Evaluation and Qualification Criteria. |
| 29.3 If a Bidder does not accept the correction of errors, its bid shall be declared non-responsive and its Bid Security shall be forfeited or the Bid Securing Declaration executed. |

| 30. Conversion to Single Currency | 30.1 For evaluation and comparison purposes, the currency (ies) of the bid shall be converted into a single currency as specified in Section III, Evaluation and Qualification Criteria. |

| 31. Bid Adjustments | 31.1 For the evaluation and comparison purposes the Employer shall adjust the bid prices using the criteria and methodology specified in Section III, Evaluation and Qualification Criteria. |
| 31.2 Unless otherwise specified in the BDS, no margin of domestic or regional preference shall apply. If a margin of preference applies, the application methodology shall be as specified in Section III, Evaluation and Qualification Criteria, and in accordance with the provisions stipulated in the Bank’s *Rules and Procedures for Procurement of Goods and Works*. |
| 31.3 If in the opinion of the Employer the bid which results in the lowest Evaluated Bid, is seriously unbalanced or front loaded or substantially below the Employer’s estimates, the Employer may 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 schedule proposed. After evaluation of the price analyses, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract. |

| 32. Qualification of the Bidder | 32.1 The Employer shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated bid. |
and substantially responsive bid meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.

32.2 The determination shall be based upon an examination of the documentary evidence of the Bidder’s qualifications submitted by the Bidder, pursuant to ITB 16.

32.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the Employer shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder’s qualifications to perform satisfactorily.

32.4 The capabilities of the manufacturers and subcontractors proposed in its Bid to be used by the lowest evaluated Bidder for identified major items of the Requirements will also be evaluated for acceptability in accordance with the criteria and methodologies defined in Section III, Evaluation and Qualification Criteria. Their participation should be confirmed with a letter of intent between the parties, as needed. Should a manufacturer or subcontractor be determined to be unacceptable, 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.

33. Comparison of Bids

33.1 Subject to ITB 29, 30 and 31, the Employer shall compare all substantially responsive bids to determine the lowest evaluated bid.

34. Employer’s Right to Accept Any Bid, and to Reject Any or All Bids

34.1 The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

G. Award of Contract

35. Award Criteria

35.1 Subject to ITB 34.1, the Employer shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

36. Notification of Award

36.1 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 Contract Forms called “the Contract Price”).

36.2 Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.

36.3 At the same time, the Employer shall also notify all other Bidders of the results of the bidding, and shall publish in UNDB online and at the Bank’s website (www.afdb.org), the results identifying the bid and lot numbers and the following information: (i) name of each Bidder who submitted a Bid; (ii) bid prices as read out at bid opening; (iii) name and evaluated prices of each Bid that was evaluated; (iv) name of bidders whose bids were rejected and the reasons for their rejection; and (v) name of the winning Bidder, and the price it offered, as well as the duration and summary scope of the contract awarded. After publication of the award, unsuccessful bidders may request in writing to the Employer for a debriefing seeking explanations on the grounds on which their bids were not selected. The Employer shall promptly respond in writing to any unsuccessful Bidder who, after Publication of contract award, requests a debriefing.

37. Signing of Contract

37.1 Promptly upon notification, the Employer shall send the successful Bidder the Contract Agreement.

37.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.

37.3 Upon the successful Bidder’s furnishing of the signed Contract Agreement and Performance Security pursuant to ITB 38, the Employer will discharge its Bid Security, pursuant to ITB 19.

37.4 Notwithstanding ITB 37.2 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 products/goods, systems or services to be supplied, where such export restrictions arise from trade regulations from a country supplying those products/goods, systems or 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 the Bank that signing of the Contract 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
products/goods, systems or services under the terms of the Contract Agreement.

38. Performance Security

38.1 Within twenty-eight (28) days of the receipt of notification of award from the Employer, the successful Bidder shall furnish the performance security in accordance with the conditions of contract, subject to ITB 31.3, using for that purpose the Performance Security Form included in Section IX, 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.

38.2 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, or execution of the Bid-Securing Declaration. In that event the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.
## Section II. Bid Data Sheet

### A. General

<table>
<thead>
<tr>
<th>ITB 1.1</th>
<th>The number of the Invitation for Bids is: N° AOO/01/APUA/ANCEE/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITB 1.1</td>
<td>The Employer is: <strong>Association of Power Utilities of Africa (APUA)</strong></td>
</tr>
<tr>
<td>ITB 1.1</td>
<td>The name of the bidding process is purchasing <strong>equipment for upgrading facilities and support for the expansion of capacity of centers of excellence and qualified of ANCEE training centers of in six (6) lots.</strong></td>
</tr>
</tbody>
</table>

The identification number of the bidding process is: **C 127/432**

The number and identification of lots comprising this bidding process are:

- **Lot 1:**
  - I-1: A training system for renewable energy, generation, transmission and distribution of electricity for KAFUE Gorge Regional Training Center (KGRTC) in Zambia.
  - I-2: A language laboratory for KAFUE Gorge Regional Training Center (KGRTC) of Zambia.

- **Lot 2:** A real-time simulator of power supply and electrical networks for the Electricity Trades Center (CME) of Côte d'Ivoire.
- **Lot 3:** A real-time simulator of power supply and power systems for Nigeria's National Power Training Institute of Nigeria (NAPTIN).

- **Lot 4:** A smart grid platform with a meteo station for the Science and Technology Center of Electricity (CSTE) of Morocco.
- **Lot 5:** A smart grid laboratory and SCADA Laboratory for Egypt's Egyptian Electricity Holding Company (EEHC).
- **Lot 6:** A photovoltaic platform for the Khlédia Training and Development Center in Tunisia.

<table>
<thead>
<tr>
<th>ITB 2.1</th>
<th>The Borrower is: <strong>Association of Power of Utilities of Africa (APUA)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ITB 2.1</td>
<td>The specific Bank financing institution is: The African Development Fund (ADF).</td>
</tr>
<tr>
<td>ITB 2.1</td>
<td>The name of the Project is: <strong>African Network of Centers of Excellence in Electricity (ANCEE)</strong></td>
</tr>
</tbody>
</table>
ITB 4.1 (a)  The individuals or firms in a joint venture, consortium or association shall be jointly and severally liable.

ITB 4.4  A list of debarred firms is available at http://www.afdb.org/debarred

B. Contents of Bidding Document

ITB 7.1  For clarification purposes only, the Employer’s address is:

For the attention of: Mr. Coordinator of ANCEE Coordination Unit.
06 BP 1444 Abidjan 06, Two Plateaux Vallons, 3rd installment lot 1761, Côte d’Ivoire ; Tel: (+225) 22 516 102 / (+225) 22 516 117

Email: mitiche.redaelhadi@apua-asea.org copy to soraya.quonian@apua-asea.org

Requests for clarifications should be received by the Purchaser no later than twenty (20) days, prior to the deadline for submission of Bids.

ITB 7.4  A Pre-Bid meeting shall not take place.

C. Preparation of Bids

ITB 10.1  The bidding documents are written in the French and English languages. Bidders are free to submit their offers in any of them.

ITB 11.1 (h)  o The Bidder must attach the following documents to its offer, establishing that the Assembly Equipment and Services comply with the Tender Documents: Bidder’s offer:

- Price schedule and quantitative and estimated detail;
- Summary of payment currencies;
- Tender guarantee (Bank guarantee)
- Technical proposal;
- Site organization;
- Method of realization;
- Mobilization program / calendar;
- Construction schedule / schedule
- Material;
- Staff proposed;
- Curriculum of the proposed staff

o Qualification of the tenderer

- Information sheet
- Information sheet on each part of a GECA;
- History of unexecuted contracts;
- Information sheet on tenderers;
- Information sheet on each part of a GECA.
- History of unexecuted contracts;
- Contracts / work in progress;
- Financial situation (balance sheets for the last three years 2016 to 2017 and 2018, certified and in accordance with the regulations of the country of origin of the tenderer or of the members of the consortium);
- Average annual turnover of activities for the last three years 2016, 2017 and 2018;
- Financing capacity;
- General experience;
- Specific experience Specific experience in the main activities

**ITB 11.1 (j)**

The Bidder shall submit with its bid the following additional documents:

- Copies of the original documents defining the constitution or legal status, the place of registration and the main place of activity;
- Written proxy of the signatory of the offer to bind the tenderer;
- Certificate of non-bankruptcy less than three (3) months from the date of submission of tenders

- A bank certificate of financial capacity of less than three months;
- A certificate of tax regularity dating from less than 3 months;
- Registration in the commercial register;
- The tax declaration of existence dating back less than 3 months;

The tenderer encloses with his offer a declaration relating to the total turnover achieved during the last three financial years, unless the total turnover is mentioned in the annual accounts approved by the competent authorities.

The tenderer must provide the most recent financial statements attesting to his financial capacity, namely: the 2018 balance sheet or the certified financial statements

- The tenderer will provide, as an integral part of his tender, documents demonstrating that all the services and supplies which he proposes to render or deliver in performance of the contract are admissible and conform to the Tender Documents (TD).
- Documents providing proof that the equipment is new and complies with the characteristics specified in the Technical Specifications.
• Documents proving that the supplies and services comply with the CAD can take the form of prospectuses, drawings and data. They will provide:
  - A detailed description of the main technical characteristics.
  - A document containing the description of the company’s technical equipment and the measures it takes to guarantee its quality;

• If the tenderer is not the designer of the equipment, he must provide an authorization from the manufacturer.
• A prospectus and a plan for installing the property.
• Documentation completed according to the appropriate forms in section IV. Submission forms, attesting that the technical proposal drawn up by the Bidder complies with the Tender Documents.

| ITB 13.1 | Alternative bids are not permitted. |
| ITB 13.2 | Alternatives to the Time Schedule shall not be permitted. |
| ITB 13.4 | Alternative technical solutions shall be permitted for the following parts of the Plant and Installation Services, as further detailed in the Specification: none. |
| ITB 14.2 | Prices shall be fixed. |
| ITB 14.3 | Bidders shall quote for the entire Plant and Installation Services on a “single responsibility” basis.
  or

Bidders shall quote for the following components or services on a “single responsibility” basis: [insert components or services required] (Not applicable)
and/or

The following components or services will be provided under the responsibility of the Employer: [insert components or services required] (Not applicable) |
| ITB 14.5(a) | The Named place of destination shall be:

Lot 1: I 1 et I 2
Kafue Gorge Regional Training Center.
P.O. Box 32774, Lusaka ZA 10101, Zambia or
P.O. Box 35, Namalundu, Zambia |
Tél: (+260) 211 363947 (+260) 211 371007/8  
E-mail: info@kgrtc.org.zm or frontdesk@kgrtc.org.zm

Lot 2:  
Centre des Métiers de l’Electricité (CME)  
Siège social : 1, Avenue Christiani Treichville  
01 BP 6923 Abidjan 01 Côte d’Ivoire  
Téléphone: (+225) 21 23 33 00  
Tél : +(225) 21 23 66 01

Lot 3:  
National Training Power Institute of Nigeria (NAPTIN),  
Corporate Head Office, Plot 21 Cadastral Zone,  
Idu Industrial Layout, Abuja, Nigeria

Lot 4:  
Centre des Sciences Technique en Electricité (CSTE)  
Route 110 (bd Chefchaouni) ; Km 9 500, Aîn Sebaâ Casablanca  
Tél : 05 22 35 04 57

Lot 5:  
Egyptian Electricity Holding Company (EEHC)  
3 Nasr Road, Nasr City  
Caire Egypt  
Téléphone : 20 2 261 6306

Lot 6: Centre de formation et de Perfectionnement de la Société Tunisienne de l’Electricité et du Gaz (STEG)  
8 rue Kamel Ataturk 1080 Tunis  
E-mail : dpsc@steg.com.tn  
Tél : (+216) 71 341 311

ITB 15.1  
The currency(ies) of The bid and the payment currency(ies) shall be as described below:  
Alternative B (Bidders allowed to quote in local and foreign currencies):  
(a) The unit rates and prices shall be quoted by the Bidder in the Schedules separately in the following currencies:  
   (i) for those inputs to the Requirements that the Bidder expects to supply from within the Employer’s country, in local currency, further referred to as “the local currency”; and  
   (ii) for those inputs to the Requirements that the Bidder expects to supply from outside the Employer’s country (referred to as “the
| ITB 16.2 | The Bidder **shall be** submit with its bid, the Manufacturer’s Authorization for each equipment. |
| ITB 16.3 | The Bidder **shall** submit with its bid, evidence that it will be represented by an Agent in the country. |
| ITB 18.1 | The bid validity period shall be: **120 days** from the deadline for submission of tenders. |
| ITB 19.1 | The Bidder shall furnish a bid security issued only by a bank in the format as provided in the bidding document, in the amount of:  
- Lot 1: Eight thousand and four hundred (8,400) euros  
- Lot 2: Five thousand (5,000) euros.  
- Lot 3: Five thousand (5,000) euros.  
- Lot 4: Eight thousand (8,000) euros  
- Lot 5: Eight thousand (8,000) euros  
- Lot 6: Five thousand (5,000) euros. |
| ITB 20.1 | In addition to the original of the Bid, the number of copies is: 4 copies and an electronic version (CD or USB) |
| ITB 20.2 | The written confirmation of authorization to sign on behalf of the Bidder shall indicate:  
(a) The name and description of the documentation required to demonstrate the authority of the signatory to sign the Bid, such as a Power of Attorney; and  
(b) In the case of Bids submitted by an existing or intended JVCA an undertaking signed by all parties (i) stating that all parties shall be jointly and severally liable, if so required in accordance with ITB 4.1(a), and (ii) nominating a Representative who shall have the authority to conduct all business for and on behalf of any and all the
parties of the JVCA during the bidding process and, in the event the 
JVCA is awarded the Contract, during contract execution.”

### D. Submission and Opening of Bids

<table>
<thead>
<tr>
<th>ITB 21.1</th>
<th>Bidders shall not have the option of submitting their bids electronically.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITB 21.1 (b)</td>
<td>The electronic bidding submission procedures shall be: NOT APPLICABLE</td>
</tr>
<tr>
<td>ITB 22.1</td>
<td>For <strong>bid submission purposes</strong> only, the Employer’s address is:</td>
</tr>
<tr>
<td></td>
<td>For the attention of Mr Mitiche Reda El Hadi, ANCEE Coordinator</td>
</tr>
<tr>
<td></td>
<td>Address: 06 BP 1444 Abidjan 06 – Côte d’Ivoire, 2 Plateaux Les Vallons 3rd Tranche Lot 1761</td>
</tr>
<tr>
<td></td>
<td>Telephone: (+225) 22 516 102 / (+225) 22 516 117</td>
</tr>
<tr>
<td></td>
<td>E-mail: <a href="mailto:mitiche.redaelhadi@apua-asea.org">mitiche.redaelhadi@apua-asea.org</a></td>
</tr>
<tr>
<td><strong>The deadline for bid submission is:</strong></td>
<td></td>
</tr>
<tr>
<td>Date: <strong>April 30, 2020</strong></td>
<td></td>
</tr>
<tr>
<td>Time: <strong>10 h 00 mn GMT</strong></td>
<td></td>
</tr>
<tr>
<td>ITB 25.1</td>
<td>The bid opening shall take place at:</td>
</tr>
<tr>
<td></td>
<td>APUA headquarters</td>
</tr>
<tr>
<td></td>
<td>2 Plateaux Les Vallons 3rd Tranche Lot 1761</td>
</tr>
<tr>
<td></td>
<td>Telephone: (+225) 22 516 102 / (+225) 22 516 117</td>
</tr>
<tr>
<td></td>
<td>Date: <strong>April 30, 2020</strong></td>
</tr>
<tr>
<td></td>
<td>Time: <strong>10 h30 mn GMT</strong></td>
</tr>
<tr>
<td>ITB 25.1</td>
<td>The electronic bid opening procedures shall be: Not applicable</td>
</tr>
</tbody>
</table>

### F. Bid Evaluation and Comparison

| ITB 31.2 | A margin of domestic or regional preference **shall not** apply. |
## Section III. Evaluation and Qualification Criteria

This Section contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders. In accordance with ITB 28 and ITB 32, 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.

<table>
<thead>
<tr>
<th>1.</th>
<th><strong>Evaluation Criteria and Methodology</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Alternative Proposal (Not permitted)</td>
</tr>
<tr>
<td>1.2</td>
<td>Correction of Arithmetical Errors (In accordance with ITB 29.1)</td>
</tr>
<tr>
<td>(a)</td>
<td>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</td>
</tr>
<tr>
<td>(b)</td>
<td>If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;</td>
</tr>
<tr>
<td>(c)</td>
<td>If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and</td>
</tr>
<tr>
<td>(d)</td>
<td>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.</td>
</tr>
<tr>
<td>1.3</td>
<td>Conversion to a Single Currency (In accordance with ITB 30)</td>
</tr>
<tr>
<td></td>
<td>The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: <strong>F CFA</strong></td>
</tr>
<tr>
<td></td>
<td>The source of exchange rate shall be: <strong>Central Bank of West African States (CBWAS)</strong></td>
</tr>
<tr>
<td></td>
<td>The date for the exchange rate shall be: <strong>the deadline of submission</strong></td>
</tr>
<tr>
<td>1.4</td>
<td>Discounts (In accordance with ITB 14.1)</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>The Employer will adjust the Bid Price, using the methodology prescribed by the Bidder in its Letter of Bid, to take account of the Discounts offered by the Bidder in its Letter of Bid, as read out at the Bid Opening.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.5</th>
<th>Quantifiable Nonmaterial Nonconformities (In accordance with ITB 28.8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The adjustment shall be made using the following methodology: Provided that a 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 the non-conforming item or component. The adjustment shall be made using the methodology indicated in Section III, Evaluation and Qualification Criteria. For a position whose price in omitted, it will be applied to the position, the highest price among the offers declared technically acceptable and retained for the financial evaluation. For a missing item, the highest price will be applied to the item among the offers declared technically acceptable and selected for financial evaluation and added to the price evaluated for comparison.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.6</th>
<th>Margin of Domestic or Regional Preference (non permitted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.7</td>
<td>Criteria and Methodology for Bid Evaluation and Adjustments (Not applicable)</td>
</tr>
<tr>
<td>(a)</td>
<td>Time Schedule:</td>
</tr>
<tr>
<td>Time to complete the Plant and Installation Services from the effective date specified in Article 3 of the Contract Agreement for determining time for completion of pre-commissioning activities is: ____. No credit will be given for earlier completion. [The completion time specified shall be for the entire Plant and Installation Services or for parts or sections of the Plant and Installation Services.]</td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td>Operating and Maintenance Costs (not applicable)</td>
</tr>
<tr>
<td>(c)</td>
<td>Functional Guarantees of the facilities</td>
</tr>
<tr>
<td>The equipment will be installed by the supplier and tested in the presence of the customer or his legal representative who will sign, at the end of the test together</td>
<td></td>
</tr>
</tbody>
</table>
with the supplier, a report of installation and smooth running. Practical training will be provided by the supplier for the benefit of the agents designated by the beneficiaries on the equipment acquired

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(d)</strong></td>
<td>Work, services, facilities, etc., to be provided by the Employer (not applicable)</td>
</tr>
<tr>
<td><strong>(e)</strong></td>
<td>Specific additional criteria (Not applicable)</td>
</tr>
<tr>
<td><strong>(f)</strong></td>
<td>Alternative Technical Solutions (Not applicable)</td>
</tr>
</tbody>
</table>
Qualification (Following Prequalification) not applicable

2.1 Update of Information
The Bidder and any subcontractors shall meet or continue to meet the criteria used at the time of prequalification.

2.2 Financial Resources
Using the relevant Forms numbered FIN3.2, FIN3.3, and CCC furnished in Section IV, Bidding Forms, the Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet:

(i) the following cash-flow requirement: _____

and

(ii) the overall cash flow requirements for this contract and its current facilities commitment.

2.3 Personnel
The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements:

<table>
<thead>
<tr>
<th>No.</th>
<th>Position</th>
<th>Total Work Experience (years)</th>
<th>Experience In Similar Work (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Bidder shall provide details of the proposed personnel and their experience records in the relevant Information Forms included in Section IV, Bidding Forms.

2.4 Equipment
The Bidder must demonstrate that it has the key equipment listed hereafter:

<table>
<thead>
<tr>
<th>No.</th>
<th>Equipment Type and Characteristics</th>
<th>Minimum Number required</th>
</tr>
</thead>
</table>
The Bidder shall provide further details of proposed items of equipment using the relevant Form in Section IV, Bidding Forms.

2.5 **Subcontractors/Manufacturers**

Subcontractors/Manufacturers for major items of supply or installation services identified in the Prequalification Document must meet or continue to meet the minimum criteria specified therein for each item.

Subcontractors for the following additional major items of supply or installation services must meet the following minimum criteria, herein listed for that item:

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description of Item</th>
<th>Minimum Criteria to be met</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

In the case of a Bidder who offers to supply and install major items of supply under the contract that the Bidder did not manufacture or otherwise produce, the Bidder shall provide the manufacturer’s authorization, using the form provided in Section IV, showing that the Bidder has been duly authorized by the manufacturer or producer of the related plant and equipment or component to supply and/or install that item in the Employer’s country. The Bidder is responsible for ensuring that the manufacturer or producer complies with the requirements of ITB 4 and 5 and meets the minimum criteria listed above for that item.
<table>
<thead>
<tr>
<th></th>
<th>Qualification (Without Prequalification)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Eligibility (TABLE)</td>
</tr>
<tr>
<td>2.2</td>
<td>Historical Contract Non-Performance (TABLE)</td>
</tr>
<tr>
<td>2.3</td>
<td>Financial Situation (TABLE)</td>
</tr>
<tr>
<td>2.4</td>
<td>Experience (TABLE)</td>
</tr>
<tr>
<td>2.5</td>
<td>Personnel (TABLE)</td>
</tr>
<tr>
<td>2.6</td>
<td>Equipment (TABLE)</td>
</tr>
<tr>
<td>2.7</td>
<td>Subcontractors (TABLE)</td>
</tr>
</tbody>
</table>
2. Qualification Tables (Without Prequalification)

<table>
<thead>
<tr>
<th>Sub-Factor</th>
<th>Requirement</th>
<th>2.1 Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Criteria</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bidder</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Single Entity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Joint Venture, Consortium or Association</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Documentation Required</td>
</tr>
<tr>
<td>1.1 Nationality</td>
<td>Nationality in accordance with ITB 4.2.</td>
<td>Must meet requirement</td>
</tr>
<tr>
<td>1.2 Conflict of Interest</td>
<td>No conflicts of interests as described in ITB 4.3.</td>
<td>Must meet requirement</td>
</tr>
<tr>
<td>1.3 Bank Ineligibility</td>
<td>Not having been declared ineligible by the Bank as described in ITB 4.4.</td>
<td>Must meet requirement</td>
</tr>
<tr>
<td>Factor</td>
<td>Sub-Factor</td>
<td>2.1 Eligibility</td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Criteria</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bidder</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Single Entity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All partners combined</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Documentation Required</td>
</tr>
<tr>
<td>1.4 Government Owned Entity</td>
<td>Compliance with conditions of ITB 4.5</td>
<td>Must meet requirement</td>
</tr>
<tr>
<td>1.5 Ineligibility based on a United Nations resolution or Borrower’s country law</td>
<td>Not having been excluded as a result of the Borrower’s country laws or official regulations, or by an act of compliance with UN Security Council resolution, in accordance with ITB 4.8</td>
<td>Must meet requirement</td>
</tr>
</tbody>
</table>

Form ELI – 1.1 and 1.2, with attachments
Letter of Bid
### 2.2 Historical Contract Non-Performance

<table>
<thead>
<tr>
<th>Sub-Factor</th>
<th>Requirement</th>
<th>Criteria</th>
<th>Bidder</th>
<th>Documentation Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2.1 History of non-performing contracts</td>
<td>Non-performance of a contract did not occur within the last five (5) years prior to the deadline for bid submission, based on all information on fully settled disputes or litigation. A fully settled dispute or litigation is one that has been resolved in accordance with the Dispute Resolution Mechanism under the respective contract, and where all appeal instances available to the bidder have been exhausted.</td>
<td>Must meet requirement by itself or as partner to past or existing JVCA</td>
<td>N / A</td>
<td>Form CON - 2</td>
</tr>
<tr>
<td>Sub-Factor</td>
<td>Requirement</td>
<td>Criteria</td>
<td>Bidder</td>
<td>Documentation Required</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------------</td>
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<td>------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Single Entity</td>
<td>Joint Venture, Consortium or Association</td>
<td></td>
</tr>
<tr>
<td>2.2.2 Failure to Sign Contract</td>
<td>Not being under execution of a Bid-Securing Declaration pursuant to ITB 4.6 for five (5) years</td>
<td>Must meet requirement</td>
<td>Must meet requirement by itself or as part of a JVCA</td>
<td>Letter of Bid</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N / A</td>
<td>N / A</td>
<td></td>
</tr>
<tr>
<td>2.2.3 Pending Litigation</td>
<td>All pending litigation shall in total not represent more than seventy percent (70%) of the Bidder’s net worth and shall be treated as resolved against the Bidder.</td>
<td>Must meet requirement by itself or as partner to past or existing JVCA</td>
<td>Must meet requirement by itself or as partner to past or existing JVCA</td>
<td>Form CON – 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N / A</td>
<td>N / A</td>
<td></td>
</tr>
<tr>
<td>Sub-Factor</td>
<td>Requirement</td>
<td>Criteria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>**2.3.1 Historical Financial</td>
<td>Submission of audited balance sheets or if not required by the law of the</td>
<td>Bidder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td>bidder’s country, other financial statements acceptable to the Employer,</td>
<td><strong>Joint Venture, Consortium or Association</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for the last five [5] years to demonstrate the current soundness of the</td>
<td>Single Entity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>bidders financial position and its prospective long term profitability.</td>
<td>All partners combined</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(a) (criterion 1)</td>
<td>Each partner</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(b) (criterion 2)</td>
<td>At least one partner</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(c)</td>
<td>Documentation Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Must meet requirement</td>
<td>N / A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>**2.3.2. Average Annual</td>
<td>Minimum average annual turnover of (lot 1): Eight hundred and forty</td>
<td>N / A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turnover</td>
<td>thousand euros (€ 840 000);</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Must meet requirement</td>
<td>Must meet requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Must meet requirement</td>
<td>Must meet requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Must meet Twenty-five percent (25%) of the requirement of lot 1;</td>
<td>Must meet forty percent (40%) of the requirement for lot 1;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Form FIN – 3.1 with attachments

Form FIN – 3.2
### 2.3 Financial Situation

<table>
<thead>
<tr>
<th>Sub-Factor</th>
<th>Requirement</th>
<th>Criteria</th>
<th>Bidder</th>
<th>Documentation Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Entity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All partners combined</td>
<td>Twenty-five percent (25%) of the requirement of lot 2; Twenty-five percent (25%) of the requirement of lot 3; Twenty-five percent (25%) of the requirement of lot 4; Twenty-five percent (25%) of the requirement of lot 5; Twenty-five percent (25%) of the requirement of lot 6.</td>
<td>forty percent (40%) of the requirement for lot 2; forty percent (40%) of the requirement for lot 3; forty percent (40%) of the requirement for lot 4; forty percent (40%) of the requirement for lot 5; forty percent (40%) of the requirement for lot 6.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Each partner</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least one partner</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

(Lot 2) Two hundred thousand (€ 200 000); (lot 3): Two hundred thousand (€ 200 000); (lot 4): Eight hundred thousand (€ 800 000); (lot 5) Eight hundred thousand (€ 800 000) (lot 6) Two hundred thousand (€ 200 000), calculated as total certified payments received for contracts in progress or completed, within the last five (5) years.
### Factor 2.3 Financial Situation

<table>
<thead>
<tr>
<th>Sub-Factor</th>
<th>Requirement</th>
<th>Criteria</th>
<th>Bidder</th>
<th>Documentation Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Single Entity</td>
<td>Joint Venture, Consortium or Association</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.3.3. Financial Resources</strong></td>
<td>The Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet: (i) the following cash-flow requirement: Lot 1: 420 000 euros Lot 2: 100 000 euros Lot 3: 100 000 euros Lot 4: 400 000 euros Lot 5: 400 000 euros and Lot 6: 100 000 euros</td>
<td>Must meet requirement</td>
<td>Must meet Twenty-five percent (25 %) of the requirement of lot 1; Twenty-five percent (25 %) of the requirement of lot 2; Twenty-five percent (25 %) of the requirement of lot 3; Twenty-five percent (25 %) of the requirement of lot 4; Twenty-five percent (25 %) of the requirement of lot 5; Forty percent (40 %) of the requirement of lot 6; Forty percent (40 %) of the requirement of lot 7; Forty percent (40 %) of the requirement of lot 8; Forty percent (40 %) of the requirement of lot 9; Forty percent (40 %) of the requirement of lot 10.</td>
<td>Must meet</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Factor</td>
<td>Requirement</td>
<td>Criteria</td>
<td>Bidder</td>
<td>Documentation Required</td>
</tr>
<tr>
<td>------------</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) the overall cash flow requirements for this contract and its current commitments.</td>
<td></td>
<td></td>
<td>All partners combined</td>
<td>requirement of lot 4.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Each partner</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>At least one partner</td>
<td></td>
</tr>
<tr>
<td>Factor</td>
<td>2.4 Experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Criteria</td>
<td>Bidder</td>
<td>Documentation Required</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Requirement</td>
<td>Single Entity</td>
<td>Joint Venture, Consortium or Association</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>All partners combined</td>
<td>Each partner</td>
<td>At least one partner</td>
</tr>
<tr>
<td><strong>2.4.1 General Experience</strong></td>
<td>Experience under contracts in the role of contractor, subcontractor, or management contractor for at least the last five [5] years prior to the bid submission deadline,</td>
<td>Must meet requirement</td>
<td>N / A</td>
<td>Must meet requirement</td>
</tr>
<tr>
<td><strong>2.4.2 Specific Experience</strong></td>
<td>(a) Participation as contractor, management contractor, or subcontractor, in at least <em>two</em> (2) contracts within the last five (5) years, each with a value of at least for the lot 1; lot 2; lot 3; lot 4, lot 5 et lot 6 in the past five (5) years with a minimum value of: lot 1: 336,000 euros lot 2; 80 000 euros lot 3; 80 000 euros and lot 4: 32 000 euros, lot 5: 32 000 euros</td>
<td>Must meet requirement</td>
<td>Must meet requirements for all characteristics</td>
<td>N / A</td>
</tr>
<tr>
<td>Sub-Factor</td>
<td>Requirement</td>
<td>2.4 Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
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<td></td>
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<tr>
<td></td>
<td>Criteria</td>
<td>Bidder</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Single Entity</td>
<td></td>
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<td></td>
<td>Joint Venture, Consortium or Association</td>
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<tr>
<td></td>
<td></td>
<td>All partners combined</td>
<td>Each partner</td>
<td>At least one partner</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>and lot 6: 80 000 euros that have been successfully and substantially completed and that are similar to the proposed Facilities. The similarity shall be based on the physical size, complexity, methods/technology or other characteristics as described in Section IV, Bidding Forms.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Factor</td>
<td>Requirement</td>
<td>Criteria</td>
<td>Bidder</td>
<td>Documentation Required</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>----------</td>
<td>--------</td>
<td>------------------------</td>
</tr>
<tr>
<td>2.4 Experience</td>
<td>b) For the above or other contracts executed during the period stipulated in 2.4.2(a) above, a minimum experience in the following key activities: 1. Conception of educational material 2. Conception of electrical equipment</td>
<td>Must meet requirements</td>
<td>Must meet requirements</td>
<td>N / A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.5 Personnel

The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements:

<table>
<thead>
<tr>
<th>No.</th>
<th>Position</th>
<th>Total Work Experience (years)</th>
<th>Experience In Similar Work (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lot 1: An engineer specialize in the design of electrical production systems (in particular ENR). An expert able to design a complete teaching solution.</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Lot 2 An Engineer specializing in the simulation of electrical networks (Design, Configuration and Operation of simulation software). An expert capable of training the user.</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Lot 3 An Engineer specializing in the simulation of electrical networks (Design, Configuration and Operation of simulation software). An expert capable of training the user.</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Lot 4; An Engineer specializing in the smart grid system. An expert capable of training the user.</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Lot 5:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
An Engineer specializing in the smart grid system.
An expert capable to design a educational teaching system and training the user.

| 6 | Lot 6: |
|   | An engineer specializing in the design of photovoltaic production systems |
|   | An expert capable of designing a complete teaching solution and training the user |

The Bidder shall provide details of the proposed personnel and their experience records using Forms PER-1 and PER-2 included in Section IV, Bidding Forms.

2.6 Equipment

The Bidder must demonstrate that it will have access to the key Contractor’s equipment listed hereafter:

<table>
<thead>
<tr>
<th>No.</th>
<th>Equipment Type and Characteristics</th>
<th>Minimum Number required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot 4</td>
<td>Equipment for installing electrical equipment in line with the relevant voltage levels</td>
<td>1</td>
</tr>
<tr>
<td>Lot 1 to lot 6</td>
<td>Equipment installation guide.</td>
<td>1</td>
</tr>
<tr>
<td>Lot 1 to lot 6</td>
<td>Safety equipment and material on site</td>
<td>1</td>
</tr>
</tbody>
</table>

The Bidder shall provide further details of proposed items of equipment using the Form EQU furnished in Section IV, Bidding Forms.

2.7 Subcontractors/manufacturers

Subcontractors/Manufacturers for the following major items of supply or installation services must meet the following minimum criteria, herein listed for that item:

<p>| Item No. | Description of Item | Minimum Criteria to be met |</p>
<table>
<thead>
<tr>
<th>Lot 4</th>
<th>Civil engineering and installation of electrical equipment</th>
<th>The beneficiary must approve the subcontracting company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot 1, lot 2; lot 3; lot 5 et lot 6</td>
<td>See list of products supplied by the manufacturers described in the specifications for each batch</td>
<td>Be compliant with the Qualifications Tables above.</td>
</tr>
</tbody>
</table>

Failure to comply with this requirement will result in rejection of the subcontractor. In the case of a Bidder who offers to supply and install major items of supply under the contract that the Bidder did not manufacture or otherwise produce, the Bidder shall provide the manufacturer’s authorization, using the form provided in Section IV, Bidding Forms, showing that the Bidder has been duly authorized by the manufacturer or producer of the related plant and equipment or component to supply and install that item in the Employer’s country. The Bidder is responsible for ensuring that the manufacturer or producer complies with the requirements of ITB 4 and 5, and meets the minimum criteria listed above for that item.
Section IV. Bidding Forms

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</thead>
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<td>Mobilization Schedule</td>
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<td>Proposed Personnel</td>
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<td>Resume of Proposed Personnel</td>
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<tr>
<td>Proposed Subcontractors for Major Items of Plant and Installation Services</td>
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</tr>
<tr>
<td>Functional Guarantees of the Proposed Facilities</td>
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<td>Others - Time Schedule</td>
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<td>Bidder’s Qualification</td>
<td>101</td>
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<td>Bidder Information Sheet</td>
<td>102</td>
</tr>
<tr>
<td>Partner to JVCA Information Sheet</td>
<td>104</td>
</tr>
<tr>
<td>Historical Contract Non-Performance</td>
<td>105</td>
</tr>
<tr>
<td>Historical Financial Performance</td>
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</tr>
<tr>
<td>Average Annual Turnover</td>
<td>109</td>
</tr>
<tr>
<td>Financial Resources</td>
<td>110</td>
</tr>
<tr>
<td>Current Contract Commitments/Works in Progress</td>
<td>111</td>
</tr>
<tr>
<td>General Experience</td>
<td>112</td>
</tr>
<tr>
<td>Specific Experience</td>
<td>113</td>
</tr>
<tr>
<td>Specific Experience in Key Activities</td>
<td>115</td>
</tr>
</tbody>
</table>
Letter of Bid
Letter of Bid – Single Stage Bidding

Date: ______________________
ICB No.: ______________________
Invitation for Bid No.: ____________

To: _______________________________________________________________________

We, the undersigned, declare that:

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

(b) We offer to [Employer to insert the services that apply, i.e., design, manufacture, test, deliver, install, precommission and commission], in conformity with the Bidding Document, the following Plant and Installation Services: ________________

(c) The price of our Bid, excluding any discounts offered in item (d) below is the sum of: [amount of foreign currency in words], [amount in figures], and [amount of local currency in words], [amount in figures]

(d) The discounts offered and the methodology for their application are: ________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

(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 Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

(f) If our bid is accepted, we commit to obtain a performance security in accordance with ITB 38 and GC 3.3, for the due performance of the Contract;

(g) We, including any subcontractors or manufacturers for any part of the contract, have or will have nationalities from eligible countries, in accordance with ITB4.2;

(h) We, including any subcontractors or manufacturers for any part of the contract, do not have any conflict of interest in accordance with ITB4.3;

(i) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB4.3, other than alternative bids submitted in accordance with ITB13;
(j) We, including any of our subcontractors or manufacturers for any part of the contract, have not been declared ineligible by the Bank, or under execution of a Bid-Securing Declaration in the Employer’s country, or under the Employer’s country laws or official regulations, or by an act of compliance with a decision of the United Nations Security Council, in accordance with ITB 4.4, 4.6 and 4.8, respectively;

(k) We are / are not under sanction by the World Bank, the IADB, EBRD or the AsDB for any action of corruption and fraud in accordance with ITB 3. [If under sanction, please provide details including date of start of sanction and duration].

(l) We are not a government owned entity/ We are a government owned entity but meet the requirements of ITB4.5;

(m) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract:

<table>
<thead>
<tr>
<th>Name of Recipient</th>
<th>Address</th>
<th>Reason</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

(If none has been paid or is to be paid, indicate “none.”)

(a) We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in the country of the Employer, as such laws have been listed by the Employer in the bidding documents for this contract.

(b) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and

(c) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Name ___________________________ In the capacity of ___________________________

Signed ____________________________

10 Bidder to use as appropriate
11 The Bank will accept the introduction of such undertaking at the request of the Borrowing country, provided the arrangements governing such undertaking are satisfactory to the Bank.
Duly authorized to sign the bid for and on behalf of ______________________________

Dated on ______________________________ day of ______________________, _____
Letter of Bid – Two-Stage Bidding, First Stage Technical Proposal

Date: ______________________
ICB No.: ___________________
Invitation for Bid No.: ________
To: __________________________

We, the undersigned, declare that:

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

(b) We offer to [Employer to insert the services that apply, i.e., design, manufacture, test, deliver, install, precommission and commission], in conformity with the Bidding Document, the following Plant and Installation Services: _____________________________

(c) We, including any subcontractors or manufacturers for any part of the contract, have or will have nationalities from eligible countries, in accordance with ITB4.2 ;

(d) We, including any subcontractors or manufacturers for any part of the contract, do not have any conflict of interest in accordance with ITB4.3;

(e) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB4.3, other than alternative bids submitted in accordance with ITB13;

(f) We, including any of our subcontractors or manufacturers for any part of the contract, have not been declared ineligible by the Bank, or under execution of a Bid-Securing Declaration in the Employer’s country, or under the Employer’s country laws or official regulations, or by an act of compliance with a decision of the United Nations Security Council, in accordance with ITB 4.4, 4.6 and 4.8, respectively;

(g) We are not a government owned entity/ We are a government owned entity but meet the requirements of ITB4.5;[12]

(h) We are / are not under sanction by the World Bank, the IADB, EBRD or the AsDB for any action of corruption and fraud in accordance with ITB 3. [If under sanction, please provide details including date of start of sanction and duration].

(i) We further undertake, if invited to do so by you, and at our own cost, to attend a clarification meeting at a place of your choice, for the purpose of reviewing our First

---

[12] Bidder to use as appropriate
Stage Technical Proposal and duly noting all amendments and additions thereto, and noting omissions therefrom that you may require.

(j) We further undertake, upon receiving your written invitation, to proceed with the preparation of our Second Stage Bid, updating our First Stage Technical Proposal in accordance with the requirements from the Memorandum of the clarification meeting, and completing our Second Stage bid for supplying the Plant and Installation Services.

(k) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract:

<table>
<thead>
<tr>
<th>Name of Recipient</th>
<th>Address</th>
<th>Reason</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
</tr>
</tbody>
</table>

(If none has been paid or is to be paid, indicate “none.”)

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in the country of the Employer, as such laws have been listed by the Employer in the bidding documents for this contract.

Name ____________________________ In the capacity of ____________________________

Signed __________________________

Duly authorized to sign the bid for and on behalf of __________________________ [name of Bidder]

Dated on ____________________________ day of ____________________________. ______
Letter of Bid – Two-Stage Bidding, Second Stage Bid

Date: ____________________________
ICB No.: ____________________________
Invitation for Bid No.: ______________

To: _______________________________________________________________________

We, the undersigned, declare that:

(d) We have examined and have no reservations to the Bidding Document, including Addenda issued in accordance with Instructions to Bidders (ITB) 8, and your requirements incorporated in the Memorandum of the clarification meeting held between us on [date];

(e) We offer to [Employer to insert the services that apply, i.e., design, manufacture, test, deliver, install, precommission and commission], in conformity with the Bidding Document the following Plant and Installation Services: ____________________________;

(f) The price of our Bid, excluding any discounts offered in item (d) below is the sum of: [amount of foreign currency in words], [amount in figures], and [amount of local currency in words], [amount in figures].

(g) The discounts offered and the methodology for their application are: ____________________________;

(h) Our bid shall be valid for a period of ____________________________ days from the date fixed for the submission deadline for the Second Stage bids as stipulated in the Letter if Invitation to submit a Second Stage Bid, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

(i) If our bid is accepted, we commit to obtain a performance security in accordance with ITB 50 and GC 3.3, for the due performance of the Contract;

(j) We, including any subcontractors or manufacturers for any part of the contract, have or will have nationalities from eligible countries, in accordance with ITB4.2;

(k) We, including any subcontractors or manufacturers for any part of the contract, do not have any conflict of interest in accordance with ITB4.3;
(l) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB4.3;

(m) We, including any of our subcontractors or manufacturers for any part of the contract, have not been declared ineligible by the Bank, or under execution of a Bid-Securing Declaration in the Employer’s country, or under the Employer’s country laws or official regulations, or by an act of compliance with a decision of the United Nations Security Council, in accordance with ITB 4.4, 4.6 and 4.8, respectively;

(n) We are not a government owned entity/ We are a government owned entity but meet the requirements of ITB4.5;\(^{13}\)

(o) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract:

<table>
<thead>
<tr>
<th>Name of Recipient</th>
<th>Address</th>
<th>Reason</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

(If none has been paid or is to be paid, indicate “none.”)

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in the country of the Employer, as such laws have been listed by the Employer in the bidding documents for this contract.

Name ____________________________ In the capacity of __________________________

Signed __________________________

Duly authorized to sign the bid for and on behalf of __________________________ [name of Bidder]

Dated on __________________________ day of ________________________, ______

\(^{13}\) Bidder to use as appropriate
# Schedules

## Schedule No. 1. Plant and Mandatory Spare Parts Supplied from Abroad

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Code(^1)</th>
<th>Qty.</th>
<th>Unit Price(^2)</th>
<th>Total Price(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2)</td>
<td>CIP (3)</td>
<td>(1) x (3)</td>
</tr>
</tbody>
</table>

TOTAL (to Schedule No. 5. Grand Summary)

Name of Bidder ________________

Signature of Bidder ________________

---

\(^1\) Bidders shall enter a code representing the country of origin of all imported plant and equipment.

\(^2\) Specify currency. Create and use as many columns for Unit Price and Total Price as there are currencies.

## Country of Origin Declaration Form

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Code</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Schedule No. 2. Plant and Mandatory Spare Parts Supplied from Within the Employer’s Country

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Qty. (1)</th>
<th>EXW Unit Price(^1) (2)</th>
<th>EXW Total Price(^1) (1) x (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL (to Schedule No. 5. Grand Summary)

Name of Bidder

Signature of Bidder

\(^1\) Specify currency in accordance with requirements stipulated in Bid Data Sheet under ITB 15.1 (Single Stage) or 29.1 (Two-Stage)
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Qty.</th>
<th>Unit Price¹</th>
<th>Total Price¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Local Currency Portion (2)</td>
<td>Foreign Currency Portion (optional)</td>
</tr>
</tbody>
</table>

TOTAL (to Schedule No. 5. Grand Summary)

Name of Bidder

Signature of Bidder

¹ Specify currency in accordance with requirements stipulated in Bid Data Sheet under ITB 15.1 (Single Stage) or 29.1 (Two-Stage)
## Schedule No. 4. Installation and Other Services

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Qty.</th>
<th>Unit Price&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Total Price&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Foreign Currency Portion</td>
<td>Local Currency Portion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
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<td></td>
</tr>
</tbody>
</table>

TOTAL (to Schedule No. 5. Grand Summary)

Name of Bidder  
Signature of Bidder

---

<sup>1</sup> Specify currency in accordance with requirements stipulated in Bid Data Sheet under ITB 15.1 (Single Stage) or 29.1 (Two-Stage)
## Schedule No. 5. Grand Summary

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Total Price[^1]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Foreign</td>
</tr>
<tr>
<td></td>
<td>Total Schedule No. 1. Plant, and Mandatory Spare Parts Supplied from Abroad</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Schedule No. 2. Plant, and Mandatory Spare Parts Supplied from Within the Employer’s Country</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Schedule No. 3. Design Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Schedule No. 4. Installation and Other Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL (to Bid Form)</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Name of Bidder**

**Signature of Bidder**

[^1]: Specify currency in accordance with requirements stipulated in Bid Data Sheet under ITB 15.1 (Single Stage) or 29.1 (Two-Stage). Create and use as many columns for Foreign Currency requirement as there are foreign currencies.
## Schedule No. 6. Recommended Spare Parts

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Qty.</th>
<th>Unit Price</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>CIF or CIP (foreign parts)</td>
<td>EXW (local parts)</td>
</tr>
<tr>
<td>(1)</td>
<td></td>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name of Bidder _______________________

Signature of Bidder _______________________

## Country of Origin Declaration Form for Recommended Spare Parts

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Code</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Where the Contract Period (excluding the Defects Liability Period) exceeds eighteen (18) months, it is normal procedure that prices payable to the Contractor shall be subject to adjustment during the performance of the Contract to reflect changes occurring in the cost of labor and material components. In such cases the bidding documents shall include in this form a formula of the following general type, pursuant to PC Clause 3.1.2.

Where Contracts are of a shorter duration than eighteen (18) months or in cases where there is to be no Price Adjustment, the following provision shall not be included. Instead, it shall be indicated under this form that the prices are to remain firm and fixed for the duration of the Contract.

### Sample Price Adjustment Formula

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 labor and material components, in accordance with the following formula:

\[
P_I = P_0 \times \left( a + b \frac{L_I}{L_0} + c \frac{M_I}{M_0} \right) - P_0
\]

in which:
- \(P_I\) = adjustment amount payable to the Contractor
- \(P_0\) = Contract price (base price)
- \(a\) = percentage of fixed element in Contract price (\(a = \%\))
- \(b\) = percentage of labor component in Contract price (\(b = \%\))
- \(c\) = percentage of material and equipment component in Contract price (\(c = \%\))
- \(L_0, L_I\) = labor indices applicable to the appropriate industry in the country of origin on the base date and the date for adjustment, respectively
- \(M_0, M_I\) = material and equipment indices in the country of origin on the base date and the date for adjustment, respectively

N.B.: \(a+b+c = 100\%\).

### Conditions Applicable To Price Adjustment
The Bidder shall indicate the source of labor and materials indices and the base date indices in its bid.

<table>
<thead>
<tr>
<th>Item</th>
<th>Source of Indices Used</th>
<th>Base Date Indices</th>
</tr>
</thead>
</table>

The base date shall be the date thirty (30) days prior to the Bid closing date.

The date of adjustment shall be the mid-point of the period of manufacture or installation of component or Plant.

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 labor and/or materials indices, a correction factor will be applied to avoid incorrect adjustments of the Contract price. The correction factor shall correspond to the ratio of exchange rates between the two currencies on the base date and the date for adjustment as defined above.

(c) No price adjustment shall be payable on the portion of the Contract price paid to the Contractor as an advance payment.

Note: For complex Plant supply and installation involving several sources of supply and/or a substantial amount of installation works, a family of formulas may be necessary, with provision for the usage of Contractor’s equipment in the works formula.
Form of Bid Security (Bank Guarantee)

__________________________ [Bank’s Name, and Address of Issuing Branch or Office]

Beneficiary: ______________________________ [Name and Address of Employer]

Date: ______________________________

BID GUARANTEE No.: ______________________________

We have been informed that __________________________ [insert name of the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof] (hereinafter called “the Applicant”) has submitted to you its bid dated ___________ (hereinafter called "the Bid") for the execution of ____________________ [name of contract] under Invitation for Bids No. ___________ (“the IFB”). Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the Applicant, we _______________ [name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of __________ [amount in figures] (____________) [amount in words] upon receipt by us of your first demand in writing accompanied by a written statement stating that the Applicant is in breach of its obligation(s) under the bid conditions, because the Applicant:

(a) has withdrawn its Bid during the period of bid validity specified by the Applicant in the Letter of Bid; or

(b) having been notified of the acceptance of its Bid by the Beneficiary during the period of bid validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the performance security, in accordance with the Bidding Document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security issued to the Beneficiary in relation to such contract agreement; or (b) if the Applicant is not the successful Bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary’s notification to the Applicant of the results of the Bidding process; or (ii)twenty-eight days after the end of the Bid Validity Period. Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.

____________________________

[signature(s)]
Form of Bid Security (Bid Bond)

BOND NO. ______________________

BY THIS BOND [name of Bidder] as Principal (hereinafter called “the Principal”), and [name, legal title, and address of surety], authorized to transact business in [name of country of Employer], as Surety (hereinafter called “the Surety”), are held and firmly bound unto [name of Employer] as Obligee (hereinafter called “the Employer”) in the sum of [amount of Bond] for the payment of which sum, well and truly to be made, we, the said Principal and Surety, bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has submitted a written Bid to the Employer dated the ___ day of ______, 20__, for the construction of [name of Contract] (hereinafter called the “Bid”).

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal:

(a) withdraws its Bid during the period of bid validity specified in the Letter of Bid; or
(b) having been notified of the acceptance of its Bid by the Employer during the period of Bid validity: (i) fails or refuses to execute the Contract Form, if required; or (ii) fails or refuses to furnish the Performance Security in accordance with the Bidding Document;

then the Surety undertakes to immediately pay to the Employer up to the above amount upon receipt of the Employer’s first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer shall state that the demand arises from the occurrence of any of the above events, specifying which event(s) has occurred.

The Surety hereby agrees that its obligation will remain in full force and effect up to and including the date 28 days after the date of expiration of the Bid validity as stated in the Invitation to Bid or extended by the Employer at any time prior to this date, notice of which extension(s) to the Surety being hereby waived.

IN TESTIMONY WHEREOF, the Principal and the Surety have caused these presents to be executed in their respective names this ___ day of ____________ 20__.

---

14 The amount of the Bond shall be denominated in the currency of the Employer's country or the equivalent amount in a freely convertible currency.
Principal: ______________________  Surety: ______________________

Corporate Seal (where appropriate)

(Signature)  (Signature)
(Printed name and title)  (Printed name and title)
Form of Bid-Securing Declaration

Date: [insert date (as day, month and year)]
Bid No.: [insert number of bidding process]
Alternative No.: [insert identification No if this is a Bid for an alternative]

To: [insert complete name of Employer]

We, the undersigned, declare that:

We understand that, according to your conditions, bids must be supported by a Bid-Securing Declaration.

We accept that we will automatically be suspended from being eligible for bidding in any contract with the Borrower for the period of time of [Employer to insert number of months or years] starting on [insert date], if we are in breach of our obligation(s) under the bid conditions, because we:

(a) have withdrawn our Bid during the period of bid validity specified in the Form of Bid; or

(b) having been notified of the acceptance of our Bid by the Employer during the period of bid validity, (i) fail or refuse to execute the Contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the ITB.

We understand this Bid-Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of our Bid.

Signed: [insert signature of person whose name and capacity are shown] In the capacity of [insert legal capacity of person signing the Bid-Securing Declaration]

Name: [insert complete name of person signing the Bid-Securing Declaration]

Duly authorized to sign the bid for and on behalf of: [insert complete name of Bidder]

Dated on ____________ day of __________________, _______ [insert date of signing]

Corporate Seal (where appropriate)

[Note: In case of a Joint Venture, Consortium or Association, the Bid-Securing Declaration must be in the name of all partners to the JVCA that submits the bid.]
Manufacturer’s Authorization

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the BDS.]

Date: [insert date (as day, month and year) of Bid Submission]
ICB No.: [insert ICB number]
Invitation for Bid No.: [insert number of bidding process]

To: [insert complete name of Employer]

WHEREAS

We [insert complete name of Manufacturer], who are official manufacturers of [insert type of goods manufactured], having factories at [insert full address of Manufacturer’s factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following goods, manufactured by us [insert name and or brief description of the goods], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 5.2 of the General Conditions, with respect to the goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Manufacturer]

Dated on ____________ day of __________________, _______ [insert date of signing]
Technical Proposal

Technical Proposal Forms

Site Organization

Method Statement

Mobilization Schedule

Construction Schedule

Plant

Contractor’s Equipment

Personnel

Proposed Subcontractors for Major Items of Plant and Installation Services

Functional Guarantees of the Proposed Facilities

Others – Time Schedule
Site Organization
Method Statement
| Mobilization Schedule |
Construction Schedule
Plant
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.

<table>
<thead>
<tr>
<th>Item of equipment</th>
<th>Equipment information</th>
<th>Model and power rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Name of manufacturer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Capacity</td>
<td>Year of manufacture</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current status</th>
<th>Current location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Details of current commitments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>Indicate source of the equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>⟨☑ Owned ⟩ ⟨☐ Rented ⟩ ⟨☐ Leased ⟩ ⟨☐ Specially manufactured ⟩</td>
</tr>
</tbody>
</table>

Omit the following information for equipment owned by the Bidder.

<table>
<thead>
<tr>
<th>Owner</th>
<th>Name of owner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Address of owner</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Owner</th>
<th>Telephone</th>
<th>Contact name and title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fax</td>
<td>Telex</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Agreements</th>
<th>Details of rental / lease / manufacture agreements specific to the project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Proposed Personnel

Form PER – 1

Bidders should provide the names of suitably qualified personnel to meet the specified requirements stated in Section III, Evaluation and Qualification Criteria. The data on their experience should be supplied using the Form below, for each candidate.

<table>
<thead>
<tr>
<th></th>
<th>Title of position*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Name</td>
</tr>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
</tbody>
</table>

*As listed in Section III.
## Resume of Proposed Personnel

### Form PER-2

The Bidder shall provide all the information requested below. Fields with asterix (*) shall be used for evaluation.

<table>
<thead>
<tr>
<th>Name of Bidder</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Position*</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Personnel information</th>
<th>Name*</th>
<th>Date of birth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Present employment</th>
<th>Name of employer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address of employer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Telephone</th>
<th>Contact (manager / personnel officer)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fax</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Job title</th>
<th>Years with present employer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Company / Project / Position / Relevant technical and management experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Proposed Subcontractors for Major Items of Plant and Installation Services

Prior to issuing the Bidding Document, the Employer should establish a list of major items of Plant and Installation Services for which approval of the Employer is required. Approved subcontractors proposed by the winning Bidder, should be included in the Appendix (List of Major Items of Plant and Installation Services and List of Approved Subcontractors) of the Contract Agreement.

In case a prequalification process is conducted a similar form may be used in the prequalification document, and updated at the time of bidding.

A list of major items of Plant and Installation Services is provided below.

The following Subcontractors and/or manufacturers are proposed for carrying out the item of the facilities indicated. Bidders are free to propose more than one for each item.

<table>
<thead>
<tr>
<th>Major Items of Plant and Installation Services</th>
<th>Proposed Subcontractors/Manufacturers</th>
<th>Nationality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Bidder shall copy in the left column of the table below, the identification of each functional guarantee required in the Specification and stated by the Employer in Sub-Factor 1.7 (c) of Section III, Evaluation and Qualification Criteria, and in the right column, provide the corresponding value for each functional guarantee of the proposed plant and equipment.

**Form FUNC**

<table>
<thead>
<tr>
<th>Functional Guarantee [as required by the Employer in Section III]</th>
<th>Functional Guarantee value offered by the Bidder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td></td>
</tr>
</tbody>
</table>
Others - Time Schedule

(to be used by Bidder when alternative Time for **Completion is invited in accordance with ITB 13.2 – [Single Stage Bidding only])**
Others – Commercial or contractual aspects of the bidding documents that the Bidder would like to discuss with the Employer during clarifications

(to be used by Bidder – Two Stage Bidding only)
To establish its 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 hereunder.
## Bidder Information Sheet

**Form ELI 1.1**

<table>
<thead>
<tr>
<th>Date: ______________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICB No.: ___________________</td>
</tr>
<tr>
<td>Invitation for Bid No.: ______</td>
</tr>
<tr>
<td>Page ______ of ______ pages</td>
</tr>
</tbody>
</table>

### 1. Bidder’s Legal Name

### 2. In case of Joint Venture, Consortium, or Association (JVCA), legal name of each party:

### 3. Bidder’s actual or intended Country of Registration:

### 4. Bidder’s Year of Registration:

### 5. Bidder’s Legal Address in Country of Registration:

### 6. Bidder’s Authorized Representative Information

Name:
Address:
Telephone/Fax numbers:
Email Address:

### 7. Attached are copies of original documents of:

- Articles of Incorporation or Registration of firm named in 1, above, in accordance with ITB Clauses 4.1 and 4.2.

- In case of JVCA, letter of intent to form JVCA including a draft agreement, or JVCA agreement, in accordance with ITB Clause 4.1.

- In case of government owned entity from the Employer’s country, documents establishing legal and financial autonomy and compliance with the principles of commercial law, in accordance with ITB Clause 4.5.
Please note that a written authorization needs to be attached to this sheet as required by ITB 16.2 (Single Stage) or 32.2 (Two-Stage)
# Partner to JVCA Information Sheet

**Form ELI 1.2**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td>_________________</td>
</tr>
<tr>
<td>ICB No.:</td>
<td>________________</td>
</tr>
<tr>
<td>Invitation for Bid No.:</td>
<td>__________</td>
</tr>
<tr>
<td>Page ______ of ______ pages</td>
<td></td>
</tr>
</tbody>
</table>

## 1. Bidder’s Legal Name:

## 2. JVCA’s Partner’s legal name:

## 3. JVCA’s Partner’s Country of Registration:

## 4. JVCA’s Partner’s Year of Registration:

## 5. JVCA’s Partner’s Legal Address in Country of Registration:

## 6. JVCA’s Partner’s Authorized Representative Information

   - Name:  
   - Address:  
   - Telephone/Fax numbers:  
   - Email Address:  

## 7. Attached are copies of original documents of:

- Articles of Incorporation or Registration of firm named in 1, above, in accordance with ITB Clauses 4.1 and 4.2.
- In case of government owned entity from the Purchaser’s country, documents establishing legal and financial autonomy and compliance with the principles of commercial law, in accordance with ITB Clause 4.5.
**Historical Contract Non-Performance**

**Form CON - 2**

In case a prequalification process was conducted this form should be used only if the information submitted at the time of prequalification requires updating.

Bidder’s Legal Name: _______________________

Date: __________________________

JVCA Partner Legal Name: _______________________

ICB No.: __________________

Page ______ of _______ pages

---

### Non-Performing Contracts in accordance with Section III, Evaluation Criteria

- [ ] Contract non-performance did not occur during the stipulated period, in accordance with Sub-Factor 2.2.1 of Section III, Evaluation and Qualification Criteria
- [ ] Contract non-performance during the stipulated period, in accordance with Sub-Factor 2.2.1 of Section III, Evaluation and Qualification Criteria.

<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome as Percent of Total Assets</th>
<th>Contract Identification</th>
<th>Total Contract Amount (current value, US$ equivalent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____</td>
<td>_____</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>__________</td>
<td>Name of Employer:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Address of Employer:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Matter in dispute:</td>
<td></td>
</tr>
</tbody>
</table>

### Pending Litigation, in accordance with Section III, Evaluation Criteria

- [ ] No pending litigation in accordance with Sub-Factor 2.2.3 of Section III, Evaluation and Qualification Criteria
- [ ] Pending litigation in accordance with Sub-Factor 2.2.3 of Section III, Evaluation and Qualification Criteria, as indicated below

<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome as Percent of Total Assets</th>
<th>Contract Identification</th>
<th>Total Contract Amount (current value, US$ equivalent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____</td>
<td>_____</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>__________</td>
<td>Name of Employer:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Address of Employer:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Matter in dispute:</td>
<td></td>
</tr>
<tr>
<td>Contract Identification:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name of Employer:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address of Employer:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matter in dispute:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Financial Situation

**Historical Financial Performance**

**Form FIN – 3.1**

*In case a prequalification process was conducted this form should be used only if the information submitted at the time of prequalification requires updating*

Bidder’s Legal Name: _______________________
Date: ___________________

JVCA Partner Legal Name: _______________________
ICB No.: __________________
Page _______ of _______ pages

To be completed by the Bidder and, if JVCA, by each partner

<table>
<thead>
<tr>
<th>Financial information in US$ equivalent</th>
<th>Historic information for previous _____ (__) years (US$ equivalent in 000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
</tr>
<tr>
<td>Information from Balance Sheet</td>
<td></td>
</tr>
<tr>
<td>Total Assets (TA)</td>
<td></td>
</tr>
<tr>
<td>Total Liabilities (TL)</td>
<td></td>
</tr>
<tr>
<td>Net Worth (NW)</td>
<td></td>
</tr>
<tr>
<td>Current Assets (CA)</td>
<td></td>
</tr>
<tr>
<td>Current Liabilities (CL)</td>
<td></td>
</tr>
</tbody>
</table>

**Information from Income Statement**

<table>
<thead>
<tr>
<th>Total Revenue (TR)</th>
</tr>
</thead>
</table>
Attached are copies of financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following conditions:

(a) Must reflect the financial situation of the Bidder or partner to a JVCA, and not sister or parent companies

(b) Historic financial statements must be audited by a certified accountant

(c) Historic financial statements must be complete, including all notes to the financial statements

(d) Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted)
Average Annual Turnover

Form FIN – 3.2
In case a prequalification process was conducted this form should be used only if the information submitted at the time of prequalification requires updating.

Bidder’s Legal Name: ___________________________ Date: ___________________
JVCA Partner Legal Name: ___________________________ ICB No.: ____________

Page _______ of _______ pages

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount and Currency</th>
<th>US$ equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Average Annual Construction Turnover

*Average annual turnover calculated as total certified payments received for work in progress or completed, divided by the number of years specified in Section III, Evaluation Criteria, Sub-Factor 2.3.2.
Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as indicated in Section III, Evaluation and Qualification Criteria.

<table>
<thead>
<tr>
<th>Source of financing</th>
<th>Amount (US$ equivalent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
</tbody>
</table>
Current Contract Commitments/Works in Progress

Form CCC

Bidders and each partner to a JVCA 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.

<table>
<thead>
<tr>
<th>Name of contract</th>
<th>Employer, contact address/tel/fax</th>
<th>Value of outstanding work (current US$ equivalent)</th>
<th>Estimated completion date</th>
<th>Average monthly invoicing over last six months (US$/month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In case a prequalification process was conducted this form should be used only if the information submitted at the time of prequalification requires updating.
**General Experience**

**Form EXP-2.4.1**

In case a prequalification process was conducted this form should be used only if the information submitted at the time of prequalification requires updating.

Bidder’s Legal Name: ____________________________ Date: ____________________

JVCA Partner Legal Name: ____________________________ ICB No.: __________

Page _______ of _______ pages

<table>
<thead>
<tr>
<th>Starting Month / Year</th>
<th>Ending Month / Year</th>
<th>Years *</th>
<th>Contract Identification</th>
<th>Role of Bidder</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____ _____</td>
<td></td>
<td></td>
<td>Contract name:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Brief Description of the Works performed by the Bidder:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Name of Employer:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>_____ _____</td>
<td></td>
<td></td>
<td>Contract name:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Brief Description of the Works performed by the Bidder:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Name of Employer:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>_____ _____</td>
<td></td>
<td></td>
<td>Contract name:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Brief Description of the Works performed by the Bidder:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Name of Employer:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>_____ _____</td>
<td></td>
<td></td>
<td>Contract name:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Brief Description of the Works performed by the Bidder:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Name of Employer:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>_____ _____</td>
<td></td>
<td></td>
<td>Contract name:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Brief Description of the Works performed by the Bidder:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Name of Employer:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Address:</td>
<td></td>
</tr>
</tbody>
</table>
Section V. Bidding Forms

*List calendar year for years with contracts *with at least nine (9) months activity* per year starting with the earliest year

### Specific Experience

#### Form EXP – 2.4.2(a)

In case a prequalification process was conducted this form should be used only if the information submitted at the time of prequalification requires updating

Bidder’s Legal Name: ___________________________ Date: ___________________
JVCA Partner Legal Name: ___________________________ ICB No.: ________________

Page _______ of _______ pages

<table>
<thead>
<tr>
<th>Similar Contract Number: ___ of ___ required.</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Identification</td>
<td>___________________________</td>
</tr>
<tr>
<td>Award date</td>
<td>___________________________</td>
</tr>
<tr>
<td>Completion date</td>
<td>___________________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Role in Contract</th>
<th>Contractor</th>
<th>Management Contractor</th>
<th>Subcontractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total contract amount</td>
<td>___________________________</td>
<td>US$_______</td>
<td></td>
</tr>
<tr>
<td>If partner in a JVCA or subcontractor, specify participation of total contract amount</td>
<td>___%</td>
<td>US$_______</td>
<td></td>
</tr>
</tbody>
</table>

Employer’s Name: ____________________________________________
Address: ____________________________________________________
Telephone/fax number: ________________________________________
E-mail: _______________________________________________________
### Specific Experience (cont.)

**Form EXP – 2.4.2(a) (cont.)**

Bidder’s Legal Name: ___________________________  
Page _______ of _______ pages  
JVCA Partner Legal Name: ___________________________

<table>
<thead>
<tr>
<th>Similar Contract No. <strong>[insert specific number]</strong> of [total number of contracts] __ required</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of the similarity in accordance with Sub-Factor 2.4.2a) of Section III:</td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td></td>
</tr>
<tr>
<td>Physical size</td>
<td></td>
</tr>
<tr>
<td>Complexity</td>
<td></td>
</tr>
<tr>
<td>Methods/Technology</td>
<td></td>
</tr>
<tr>
<td>Physical Production Rate</td>
<td></td>
</tr>
</tbody>
</table>
## Specific Experience in Key Activities

**Form EXP – 2.4.2(b)**

In case a prequalification process was conducted this form should be used only if the information submitted at the time of prequalification requires updating.

<table>
<thead>
<tr>
<th>Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bidder’s Legal Name:</td>
<td></td>
</tr>
<tr>
<td>Date:</td>
<td></td>
</tr>
<tr>
<td>JVCA Partner Legal Name:</td>
<td></td>
</tr>
<tr>
<td>ICB No.:</td>
<td></td>
</tr>
<tr>
<td>Subcontractor’s Legal Name:</td>
<td></td>
</tr>
<tr>
<td>Page of pages</td>
<td></td>
</tr>
</tbody>
</table>

| Contract Identification                  |   |
| Award date                               |   |
| Completion date                          |   |

<table>
<thead>
<tr>
<th>Role in Contract</th>
<th>Contractor</th>
<th>Management Contractor</th>
<th>Subcontractor</th>
</tr>
</thead>
</table>

| Total contract amount       | US$________ |
| If partner in a JVCA or subcontractor, specify participation of total contract amount | % US$________ |

| Employer’s Name:            |   |
| Address:                    |   |
| Telephone/fax number:       |   |
| E-mail:                     |   |
# Specific Experience in Key Activities (cont.)

**Form EXP – 2.4.2 (b)(cont.)**

Bidder’s Legal Name: ___________________________  Page _______ of _______ pages  
JVCA Partner Legal Name: ___________________________  
Subcontractor’s Legal Name: ___________________________

<table>
<thead>
<tr>
<th>Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of the key activities in accordance with Sub-Factor 2.4.2b) of Section III:</td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td></td>
</tr>
<tr>
<td>Physical size</td>
<td></td>
</tr>
<tr>
<td>Complexity</td>
<td></td>
</tr>
<tr>
<td>Methods/Technology</td>
<td></td>
</tr>
<tr>
<td>Physical Production Rate</td>
<td></td>
</tr>
</tbody>
</table>
Section V. Eligible Countries

Eligibility for the Provision of Goods, Works and Related Services in Bank-financed Procurement

A. Provision at Paragraph 1.6 of the Bank’s Rules and Procedures for Procurement of Goods and Works

1.6 The African Development Fund permits firms and individuals from all countries to offer goods, works and services for ADF funded projects. However, the proceeds of any Financing undertaken in the operations of the African Development Bank and the Nigeria Trust Fund shall be used for procurement of goods and works, including the related services, provided by bidders from Eligible Countries. Any conditions for participation shall be limited to those that are essential to ensure the firm’s capability to fulfill the contract in question. In the case of ADB and NTF, bidders from non-Member Countries offering goods, works and related services (including transportation and insurance) are not eligible even if they offer these from Eligible Member Countries. Any waiver to this rule will be in accordance with the Articles 17(1) (d) of the Agreement Establishing the African Development Bank and 4.1 of the Agreement Establishing the Nigeria Trust Fund.

B. Provision at Appendix 4 of the Bank’s Rules and Procedures for Procurement of Goods and Works

Overview

1. The eligibility criteria for participation in the supply of goods, works and related services, to be procured through the ADB and NTF Financing, derive from the requirements of the Agreement Establishing the African Development Bank, Article 17.1.d, and the Agreement Establishing the Nigeria Trust Fund, Article 4.1. The foregoing requirements basically prescribe two types of eligibility criteria:

- The eligibility of the bidder;
- The eligibility of the goods, works and related services.

Eligibility of the Bidder

2. The eligibility of the bidder shall be based on nationality, in accordance with the following rules:

---

15 Refer to Appendix 4 for additional information on Eligibility.
16 “Eligible Countries” shall mean: (a) in the case of the African Development Bank and the Nigeria trust Fund, the Member Countries of the African Development Bank.
(a) **Natural Persons:** A natural person is eligible if he or she is a national of a Member Country of the Bank, or a State Participant of the Fund. Where a person has more than one nationality, such a person shall be eligible if the nationality indicated in his or her bid is that of a Member Country of the Bank, or a State Participant of the Fund.

(b) **Corporations:** A corporation is eligible if it satisfies the following criteria:

1. it is incorporated in a country that is a Member of the Bank, or State Participant of the Fund;
2. it is a national of a country that is a Member of the Bank, or State Participant of the Fund, as determined by the law of its place of incorporation;
3. it has its principal place of business in a country that is a Member of the Bank, or State Participant of the Fund.

(c) **Joint Ventures and Associations:** An unincorporated joint venture, partnership, or association, shall be eligible if at least 60% of its individual, or corporate members, satisfy the eligibility requirement for individuals or corporations.

**Eligibility of the Goods, Works and Related Services**

3. In order to be eligible, the goods to be procured must have been mined, grown, or produced, in the form in which they are purchased, in an Eligible Member Country.

4. For works contracts, which may include civil works, plant construction, or turnkey contracts, the contractor must satisfy the nationality criteria of eligibility, either as a natural person, or corporation, or joint venture and association. Labour, equipment, and materials needed for carrying out the works contract, shall be supplied from Eligible Member Countries.

5. For contracts, which have been awarded on the basis of Cost, Insurance and Freight (CIF), or Carriage and Insurance Paid (CIP), bidders shall be free to arrange for ocean and other transportation, and the related insurance, from any Eligible Member Country. On the other hand, where goods are shipped on FOB basis, and the Bank has agreed to finance transportation and insurance separately, which are arranged by the purchaser, under a separate contract, the Bank shall be satisfied that the services are supplied from Eligible Member Countries.

C. **Eligible Countries**
PART 2 – Employer’s Requirements
Section VI. Requirements

Contents

1. LOT 1
1.1. List of Goods and Services
1.2. Delivery and completion schedule
1.3. Technical specifications

LOT 2 A real-time simulator in French of electrical power systems and electrical networks for the Electricity Trades Center (CME) of Côte d'Ivoire.

2. Lot 2: A real-time simulator in French of electrical power systems and electrical networks for the Electricity Trades Center (CME) of Côte d'Ivoire.

2.1. Goods and services
2.2. Delivery and completion schedule
2.3. Technical specifications

3. Lot 3: One Real Time National Power Training Institute of Nigeria (NAPTIN) in Nigeria
3.1. Goods and services
3.2. Delivery and completion schedule
3.3. Technical specifications

4. LOT 4 A smart grid platform and a weather station for the Center of Science and Technology of Electricity (CSTE) in Morocco.
4.1. List of Goods and Services
4.2. Delivery and completion schedule
4.3. Technical specifications
**Lot 5**: One SMART GRID Laboratory and SCADA laboratory for Egyptian Electricity Holding Company (EEHC) in Egypt

5.1. List of Goods and Services

5.2. Delivery and completion schedule

5.3. Technical specifications

**LOT 6**: Turnkey Photovoltaic Platform and train the trainer for an energy efficiency trainer (STEG) in Tunisia

6.1. List of Goods and Services

6.2. Delivery and completion schedule

6.3. Technical specifications
1. LOT 1

1.1 List of Goods

<table>
<thead>
<tr>
<th>Name of Goods</th>
<th>Brief Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Platform on Renewable, generation, transmission, distribution and energy management for Kafue Gorge Régional Training Centre (KGRTC) in Zambia</td>
<td>One didactic platform to train technician and engineers on the following topics :</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>- Energy generation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Transmission Line Simulation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Power Transformer Simulation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- HVDC system Simulation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Distribution</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Energy management and quality</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Protection system</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Train the trainer program for 2 employees</td>
<td></td>
</tr>
<tr>
<td>One Language lab with a capacity of 30 learners for Kafue Gorge Regional Training Centre (KGRTC) in Zambia</td>
<td>A complete and integrated solution to train 30 learners in different languages</td>
<td>1</td>
</tr>
</tbody>
</table>

List of Related Services

<table>
<thead>
<tr>
<th>Name of Related Service</th>
<th>Brief Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>Train the trainer program for 2 KGRTC employees in English.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>This training should address at least the following topics:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>. Power Generation (Wind, Solar, hydro and thermal)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>. Transmission line</td>
<td></td>
</tr>
<tr>
<td></td>
<td>. FACTS and HVDC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>. Voltage control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>. Communication and SCADA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>. Protection systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>. Consumption, Active and Dynamic Loads, Reactive Power Compensation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>. Batteries storage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>. Application and Case studies on KGRTC own network</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Practical training should represent more than 70% of the</td>
<td>Train the trainer program.</td>
<td></td>
</tr>
<tr>
<td>train the trainer program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workbooks containing project-oriented exercises need to</td>
<td>be provided during the training and use by KGRTC for future</td>
<td></td>
</tr>
<tr>
<td>need to be provided during the training and use by</td>
<td>internal training.</td>
<td></td>
</tr>
<tr>
<td>KGRTC for future internal training.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1.2 Delivery and Completion Schedule

Location of the project site:

Kafue Gorge Régional Training Centre (KGRTC) en Zambie.
P.O. Box 32774
Lusaka ZA 10101, Zambia

The period of execution of the contract is for delivery is three (3) month from the date of signature of the contract for the two equipment
### 1.3-Techical Specifications

Training Platform on Renewable, generation, transmission, distribution and energy management for Kafue Gorge Régional Training Centre (KGRTC) in Zambia.

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantité</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Training Platform – Electricity &amp; Electronics</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
<td></td>
</tr>
<tr>
<td>This platform includes:</td>
<td></td>
</tr>
<tr>
<td><strong>GENERATION</strong></td>
<td></td>
</tr>
<tr>
<td>• Synchronization Unit</td>
<td>1</td>
</tr>
<tr>
<td>• Three-phase synchronous machine with smooth core rotor, 1kW</td>
<td>1</td>
</tr>
<tr>
<td>• Multi-function relay, power controller, cos-phi controller</td>
<td>1</td>
</tr>
<tr>
<td>• Three-phase synchronous generators</td>
<td>1</td>
</tr>
<tr>
<td>• Multi-function relay, power controller, cos-phi controller, synchronizing unit</td>
<td>1</td>
</tr>
<tr>
<td>• Power switch module</td>
<td>1</td>
</tr>
<tr>
<td>• Variable Ohmic load, three-phase, 1kW</td>
<td>1</td>
</tr>
<tr>
<td>• Inductive load, three-phase, 1kW</td>
<td>1</td>
</tr>
<tr>
<td>• Transformer / Generator differential protection relay</td>
<td>1</td>
</tr>
<tr>
<td>• Rotor-earth fault relay</td>
<td>1</td>
</tr>
<tr>
<td>• Digital/analog multimeter, wattmeter, power-factor incl. software</td>
<td>1</td>
</tr>
<tr>
<td><strong>WIND</strong></td>
<td></td>
</tr>
<tr>
<td>• Control unit for wind turbine, double-fed asynchronous generator</td>
<td>1</td>
</tr>
<tr>
<td>• Three-phase multi-function machine, 1.0kW</td>
<td>1</td>
</tr>
<tr>
<td>• 3-phase isolation transformer, 1kW for wind power plants</td>
<td>1</td>
</tr>
<tr>
<td>• Incremental position encoder 1024 pulses</td>
<td>1</td>
</tr>
<tr>
<td>• Dynamic grid fault simulator</td>
<td>1</td>
</tr>
<tr>
<td>• Charge controller for small wind generator 12 V</td>
<td>1</td>
</tr>
<tr>
<td>• Synchronous generator 12V for small wind power plant with permanent magnets</td>
<td>1</td>
</tr>
<tr>
<td>• Lamp board 12V</td>
<td>1</td>
</tr>
<tr>
<td>• Load unit 1kOhm, 500W</td>
<td>1</td>
</tr>
<tr>
<td>• Off-grid inverter 230V, 275VA</td>
<td>1</td>
</tr>
<tr>
<td>• Lamp board 230V</td>
<td>1</td>
</tr>
<tr>
<td><strong>Small-scale wind turbine 370W, with demonstration mast</strong></td>
<td>1</td>
</tr>
<tr>
<td>• Power output: 370W</td>
<td>1</td>
</tr>
<tr>
<td>• Nominal wind speed 12.5m/s</td>
<td>1</td>
</tr>
<tr>
<td>• Rotor diameter 1.2m</td>
<td>1</td>
</tr>
<tr>
<td>• Control of rotor blades dependent on wind speed</td>
<td>1</td>
</tr>
<tr>
<td>• Permanent-field generator, 3-phase with rectifier</td>
<td>1</td>
</tr>
</tbody>
</table>
### SOLAR
- Demonstration mast with base, made of V2A steel
- Height of generator axle: 1.5m
- Weight: 18.3kg

#### SOLAR
- Solar module simulation model, 3-fold, 23V / 2A
- Solar module with solar altitude emulator
- Load unit 1kOhm, 500W
- Off-grid inverter 230V, 275VA
- Lamp board 12V
- Lamp board 230V

### SOLAR PUMP SYSTEM
- Large lower basin
- Industrial pump system with pump and controller
- Controller with MPP control of solar power
- Protection against reverse polarity, overload and overheating
- Level sensor to protect the pump
- Integrated industrial pressure sensor
- Relay for control of DC power supply and the upper tank's sensor
- Relay control, manually or via SCADA software

### HVDC Converter Station
- HVDC Transmission line Model 300km / 186miles
- Variable Ohmic load, three-phase, 1kW
- Dynamic grid fault simulator

### Electric power distribution
- Three-phase asynchronous motor
- Double busbar unit, three-phase, incoming / outgoing feeder
- Double busbar unit, three-phase, coupler panel
- Variable Ohmic load, three-phase, 1kW
- Transmission line model 150km/300km

### Energy management
- Variable Ohmic load, three-phase, 1kW
- Capacitive load, three-phase, 1kW
- Inductive load, three-phase, 1kW
- Adjustable 3-phase power supply, 0-450V/2A

### Protection for Electrical Consumers
- Board for motor protection systems 1kW
- Three-phase motor with different temperature sensors 1kW

### Accessories
Mobile experiment stand, sockets, Power supply, flat screen Monitor.

### Software
SCADA Power Engineering Lab software
One Language lab with a capacity of 30 learners for Kafue Gorge Régional Training Centre (KGRTC) in Zambia

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantité</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language lab with a capacity of 30 learners:</td>
<td>1</td>
</tr>
</tbody>
</table>

**Equipment**

A complete solution for 30 learners:

- Student terminals
- Tables and chairs
- Receivers / Headphone
- 1 transmitter
- Teacher Terminal
- Audio data switch
- Multi media devices

**Software**

Language lab software
• Drawings

None
2- LOT 2

2.1 List of Goods

<table>
<thead>
<tr>
<th>Name of Goods</th>
<th>Brief Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Real Time Simulator of power supply and power systems in French for le Centre des métiers de l’Électricité (CME) of Côte d’Ivoire.</td>
<td>4 licences of a software dedicated to:  - Simulation of control / command, monitoring and protection  - Modelling and simulation of production, transmission, electrical energy consumption  - The use of predefine electrical models  Train the trainer program for 4 employees of CME</td>
<td>4</td>
</tr>
</tbody>
</table>

List of Related Services

<table>
<thead>
<tr>
<th>Name of Related Service</th>
<th>Brief Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training for CME</td>
<td>Training in Côte d’Ivoire and in French of 4 employees of CME to use simulation software</td>
<td>1</td>
</tr>
</tbody>
</table>

2.2-Delivery and Completion Schedule

Location

- CME : CME : 1, Avenue Christiani Treichville

The period of execution of the contract is for delivery is three (3) month from the date of signature of the contract.
## 2.3 Technical Specifications

### CME

<table>
<thead>
<tr>
<th>Items</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment</strong></td>
<td></td>
</tr>
<tr>
<td>4 working station (computer, flat screen and power supply)</td>
<td></td>
</tr>
<tr>
<td><strong>Hardware Real Time simulator:</strong></td>
<td></td>
</tr>
<tr>
<td>OP5031 Real-TimeServer – 8cores</td>
<td>1</td>
</tr>
<tr>
<td>- 1 x Xeon E5 with 8 Coreset 3.2 GHz</td>
<td></td>
</tr>
<tr>
<td>- OS Linux</td>
<td></td>
</tr>
<tr>
<td><strong>Hardware Input Output OP5600</strong></td>
<td>1</td>
</tr>
<tr>
<td>OP5600I/O Expansion Unit (4U)</td>
<td></td>
</tr>
<tr>
<td>Analog output card 16 channels, 16 bits, 35mA, 1us, ±1V to ±16V</td>
<td></td>
</tr>
<tr>
<td>Analog input card (16 channels, 16 bits, 2.5us, ±5V up to ±16V)</td>
<td></td>
</tr>
<tr>
<td>Digital input card (32 channels, optocouplers, 4.5V to 30V)</td>
<td></td>
</tr>
<tr>
<td>Digital output card (32 channels, push-pul, FET, 5V to 15V, 50ns)</td>
<td></td>
</tr>
<tr>
<td>Intel Quad Port Ethernet Server Adapter</td>
<td></td>
</tr>
<tr>
<td><strong>Software</strong></td>
<td>4</td>
</tr>
<tr>
<td>4 licences of a software dedicated to:</td>
<td></td>
</tr>
<tr>
<td>- Simulation of control / command, monitoring and protection</td>
<td></td>
</tr>
<tr>
<td>- Modelling and simulation of production, transmission, electrical energy consumption</td>
<td></td>
</tr>
<tr>
<td>- The use of predefine electrical models</td>
<td></td>
</tr>
<tr>
<td><strong>Training</strong></td>
<td></td>
</tr>
<tr>
<td>Training in Cote d’Ivoire and in French of 4 employees of CME to use simulation software</td>
<td></td>
</tr>
<tr>
<td>The training should cover at least the following topics:</td>
<td></td>
</tr>
<tr>
<td>- Software installation</td>
<td></td>
</tr>
</tbody>
</table>
- Real-time simulation principles
- Real time simulations distributed or parallel
- Model connection with inputs / outputs
- Review of communication protocols
- Use of libraries
- Creation, testing, simulation and analysis of complex systems in real time
- Reporting

The training should include at least 70% of practical cases to ensure each participant a perfect command of the software and its applications.

Course materials in French language and practical exercises will be provided to enable CME to train its teams internally.

**Drawings**

**None**
3 LOT 3

3.1 List of Goods

<table>
<thead>
<tr>
<th>Name of Goods</th>
<th>Brief Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Real Time Simulator of power supply and power systems in English for National Power Training Institute of Nigeria (NAPTIN) in Nigeria.</td>
<td>4 licences of a software dedicated to:</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>- Simulation of control / command, monitoring and protection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Modelling and simulation of production, transmission, electrical energy consumption</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The use of predefine electrical models</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Train the trainer program for 4 employees of NAPTIN</td>
<td></td>
</tr>
</tbody>
</table>

List of Related Services

<table>
<thead>
<tr>
<th>Name of Related Service</th>
<th>Brief Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training NAPTIN</td>
<td>Training in Nigeria of 4 employees of NAPTIN in English to use simulation software.</td>
<td>1</td>
</tr>
</tbody>
</table>
3.2 Delivery and Completion Schedule

Location

- NAPTIN: Idu Industrial Area, Plot 21, Cadastral Zone, Mbora District, Abuja, Nigeria

The period of execution of the contract is for delivery is three (3) month from the date of signature of the contract.
# NAPTIN

<table>
<thead>
<tr>
<th>Items</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment</strong></td>
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<tr>
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<td></td>
</tr>
<tr>
<td>- OS Linux</td>
<td></td>
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<td><strong>Hardware Input Output OP5600</strong></td>
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</tr>
<tr>
<td>OP5600 I/O Expansion Unit (4U)</td>
<td></td>
</tr>
<tr>
<td>Analog output card 16 channels, 16 bits, 35mA, 1us, ±1V to ±16V)</td>
<td></td>
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<tr>
<td>Analog input card (16 channels, 16 bits, 2.5us, ±5V up to ±16V)</td>
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<tr>
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<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td><strong>Software</strong></td>
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</tr>
<tr>
<td>4 licenses of a software dedicated to:</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>- Modelling and simulation of production, transmission, electrical energy consumption</td>
<td></td>
</tr>
<tr>
<td>- The use of predefine electrical models</td>
<td></td>
</tr>
<tr>
<td><strong>Training</strong></td>
<td></td>
</tr>
<tr>
<td>Training in Nigeria of 4 employees of NAPTIN in English to use simulation software.</td>
<td></td>
</tr>
<tr>
<td>The training should cover at least the following topics:</td>
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</tr>
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<td>- Software installation</td>
<td></td>
</tr>
<tr>
<td>- Real-time simulation principles</td>
<td></td>
</tr>
<tr>
<td>- Real time simulations distributed or parallel</td>
<td></td>
</tr>
<tr>
<td>- Model connection with inputs / outputs</td>
<td></td>
</tr>
<tr>
<td>- Review of communication protocols</td>
<td></td>
</tr>
<tr>
<td>- Use of libraries</td>
<td></td>
</tr>
<tr>
<td>- Creation, testing, simulation and analysis of complex systems in real time</td>
<td></td>
</tr>
</tbody>
</table>
- **Reporting**

The training should include at least 70% of practical cases to ensure each participant a perfect command of the software and its applications.

Course materials in English language and practical exercises will be provided to enable NAPTIN to train its teams internally.
Drawings

None
4- LOT 4

4.1 List of Goods

<table>
<thead>
<tr>
<th>Name of Goods</th>
<th>Brief Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>One smart grid platform.</td>
<td>One smart grid platform and one Weather station for the Centre des Sciences et Technique de l’Électricité (CSTE) in Marocco.</td>
<td>1</td>
</tr>
</tbody>
</table>

List of Related Services

<table>
<thead>
<tr>
<th>Name of Related Service</th>
<th>Brief Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.2- Delivery and Completion Schedule

Location:

- CSTE : Route 110 (bd Chefchaouni), Km 9,500, Aïn Sebaâ, CASABLANCA, Maroc

The period of execution of the contract is for delivery is three (3) month from the date of signature of the contract.
4.3-Technical Specifications

Name of Goods or Related Service: One smart grid platform and one Weather station for the Centre des Sciences et Technique de l’Électricité (CSTE) in Morocco.

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Note:</strong> The detailed specifications are available in the appendix of this document.</td>
<td></td>
</tr>
<tr>
<td><strong>Photovoltaic microcontroller of 40 kWc</strong></td>
<td></td>
</tr>
<tr>
<td>Lot of photovoltaic modules for the microcentral 40 kWc</td>
<td>1</td>
</tr>
<tr>
<td>(the detail Number and characteristics of the modules is to be determined during the study)</td>
<td></td>
</tr>
<tr>
<td>Module supports with accessories</td>
<td>1</td>
</tr>
<tr>
<td>Inverters with supports</td>
<td>4</td>
</tr>
<tr>
<td>Breakers Lot</td>
<td>1</td>
</tr>
<tr>
<td>Cables and mounting accessories by installation.</td>
<td>1</td>
</tr>
<tr>
<td>Electrical cabinet</td>
<td>1</td>
</tr>
<tr>
<td>Didactic table and PC in communication with the inverters</td>
<td>1</td>
</tr>
<tr>
<td><strong>Photovoltaic microprocessor of 2 kWc</strong></td>
<td></td>
</tr>
<tr>
<td>Photovoltaic modules for the microcentral 2 kWc</td>
<td>1</td>
</tr>
<tr>
<td>(the detail Number and characteristics of the modules is to be determined during the study)</td>
<td></td>
</tr>
<tr>
<td>Module supports with accessories</td>
<td>1</td>
</tr>
<tr>
<td>Inverters with supports</td>
<td>2</td>
</tr>
<tr>
<td>Breakers Lot</td>
<td>1</td>
</tr>
<tr>
<td>Pack of waterproof gel batteries</td>
<td>1</td>
</tr>
<tr>
<td>Lot of Regulators</td>
<td>1</td>
</tr>
<tr>
<td>Cables and mounting accessories by installation</td>
<td>1</td>
</tr>
<tr>
<td>Item</td>
<td>Quantity</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Electrical cabinet</td>
<td>1</td>
</tr>
<tr>
<td>Didactic table and PC in communication with the inverters</td>
<td>1</td>
</tr>
<tr>
<td><strong>Turbine 1-3 kWp</strong></td>
<td></td>
</tr>
<tr>
<td>Turbine 1-3 kWp</td>
<td>1</td>
</tr>
<tr>
<td>Supply of the supervision and energy management system</td>
<td>1</td>
</tr>
<tr>
<td>Weather station</td>
<td>1</td>
</tr>
<tr>
<td><strong>HTA / LV Smart Network</strong></td>
<td></td>
</tr>
<tr>
<td><strong>1 - Network 22 KV</strong></td>
<td></td>
</tr>
<tr>
<td>Post reinforced concrete class B 12 m 1000 daN</td>
<td>1</td>
</tr>
<tr>
<td>Reinforced concrete column class B 12 m 500 daN</td>
<td>1</td>
</tr>
<tr>
<td>Normal foundation mass</td>
<td>6 m³</td>
</tr>
<tr>
<td>Galvanized metal joinery</td>
<td>50 kg</td>
</tr>
<tr>
<td>Galvanized metal</td>
<td>1</td>
</tr>
<tr>
<td>Set of 3 arresters</td>
<td>9</td>
</tr>
<tr>
<td>Insulator chain in composite materials including accessories + anchor clamp (36 kV insulation)</td>
<td></td>
</tr>
<tr>
<td>Supply of Almelec cable 34.4 mm²</td>
<td>50 kg</td>
</tr>
<tr>
<td>Cable PRC USP 15/25 kV</td>
<td>120 m</td>
</tr>
<tr>
<td>Single Pole Radial Aluminum Unipolar Cable 1x50mm²</td>
<td></td>
</tr>
<tr>
<td>PRC USP 15/25 kV</td>
<td>120 m</td>
</tr>
<tr>
<td>Single Pole Radial Aluminum Unipolar Cable 1x50mm²</td>
<td></td>
</tr>
<tr>
<td>Supply of synthetic inner type end box for Alu or Cu cable insulated with PRC 15/25 kV isolation voltage 36 kV</td>
<td>6</td>
</tr>
<tr>
<td>Supply of external type synthetic end boxes for 15 V or 25 kV insulated aluminum or Cu cable Insulation voltage 36 kV</td>
<td>3</td>
</tr>
<tr>
<td>Item</td>
<td>Quantity</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Cover galvanized sheet metal 5 m</td>
<td>1</td>
</tr>
<tr>
<td>ONE MV or LV signal terminal</td>
<td>5</td>
</tr>
<tr>
<td>Provision of a fault detection device on underground cable MV (DDS)</td>
<td>1</td>
</tr>
</tbody>
</table>

### 2 – Civil Work + Local + Field

Supply of a prefabricated transformer station with 1 grid cell + 1 transformer cells + a general protection circuit breaker cell (including installation of wall mounted lock)  
Supply of a prefabricated substation with 1 grid cells for general protection circuit breaker + 1 transformer cubicles with fuse (including installation of wall mounted lock) + an MV meter cell  
Supply of mini monitored substation  
Providing digital protection relays  
Supply of auxiliary equipment prefabricated cell (LV + Smart metering)  
Supply of an inverter  
Supply of three-phase power transformer with plug-in terminals star delta 22 kV / B2 50 kV  
Supply of three-phase power transformer with plug-in terminals B2 / 22 kV 50 kV

### 3 - Low Voltage Network

Supply of reinforced concrete post class A 9 m 300 daN  
Supply of reinforced concrete post class A 9 m 500 daN  
Supply of Normal Foundation Massif  
Transfer particular connection aero-underground (aerial-underground lift) 2 wires  
Transfer particular connection aero-underground (subterranean-underground) 4-wire
### Section VII. Cahier des Clauses Administratives Générales

<table>
<thead>
<tr>
<th>Earthing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Preassembled insulated aluminum cable with neutral carrier in Almelec 3x70 Alu + 54.6 Alm</td>
<td>1</td>
</tr>
<tr>
<td>Accessories for preassembled twisted insulated cable strung on pole single anchor assembly</td>
<td>2</td>
</tr>
<tr>
<td>Accessories for preassembled twisted insulated cable stretched over post anchor double anchor</td>
<td>2</td>
</tr>
<tr>
<td>Aero-underground (DAS) junction box for RO2V or RVFV insulated copper cable and pre-assembled Aluminium cable</td>
<td>1</td>
</tr>
<tr>
<td>Supply of unipolar insulated cable U 1000 RO2V copper 1x25mm2</td>
<td>200m</td>
</tr>
<tr>
<td>Supply of compressed concrete pipe (diameter 200)</td>
<td>200m</td>
</tr>
<tr>
<td>Supply of protection tube gas</td>
<td>1</td>
</tr>
<tr>
<td>Supply of ONE / LV signaling terminal</td>
<td>1</td>
</tr>
<tr>
<td>Supply of Reinforced Vinysol Cable in Aluminum 3x185 + 1x70mm2</td>
<td>200m</td>
</tr>
<tr>
<td>Supply of Reinforced Vinysol Cable in Aluminium 3x185 + 1x70mm3</td>
<td>200m</td>
</tr>
</tbody>
</table>

### SCADA System + smart meters

|  |
|-----------------|---|
| Supply of a SCADA System | 1 |
| Supply of MV smart meter | 1 |
| Supply of LV smart meters | 1 |

### Telecommunications Networks and Security Equipment

|  |
|-----------------|---|
| Supply of Structured Pre-Wiring System in Optical Fiber and Twisted Copper Pairs | 1 |
| Provision of LAN Level 2 Switches | 1 |
| Supply of UTM safety equipment | 1 |
Supply of an IT Platform with five (5) years manufacturer’s warranty

Hyper-converged platform, consisting of Servers (4 minimum) with internal storage, two LAN switches, Server Virtualization Solution and Storage with Replication licenses, Cables and other accessories (The characteristics of the platform will be determined during the study)

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other supplies (PCs, Printers, Inverter) with five years warranty</td>
<td></td>
</tr>
<tr>
<td>Office PC supply</td>
<td></td>
</tr>
<tr>
<td>PC</td>
<td>8</td>
</tr>
<tr>
<td>Supply of white and black laser printers</td>
<td>2</td>
</tr>
<tr>
<td>Supply of inverter</td>
<td>1</td>
</tr>
<tr>
<td>Supply of computer cabinet</td>
<td>1</td>
</tr>
<tr>
<td>Supply of display screen</td>
<td>1</td>
</tr>
</tbody>
</table>
### 5-LOT 5

#### 5.1 List of Goods

<table>
<thead>
<tr>
<th>Name of Goods</th>
<th>Brief Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>One SMART GRID Laboratory and SCADA laboratory.</td>
<td>One SMART GRID Laboratory and SCADA Laboratory for Egyptian Electricity Holding Company (EEHC) in Egypt.</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of Related Service</th>
<th>Brief Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.2-Delivery and Completion Schedule

Location:

- EEHC: Mokattam Training Institute – Cairo - Egypt

The period of execution of the contract is for delivery is three (3) month from the date of signature of the contract.
5.3-Technical Specifications

Name of Goods or Related Service: One SMART GRID Laboratory and SCADA laboratory for Egyptian Electricity Holding Company (EEHC) in Egypt.

<table>
<thead>
<tr>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment</strong></td>
<td></td>
</tr>
<tr>
<td>Smart Grid laboratory including:</td>
<td></td>
</tr>
<tr>
<td>- A photovoltaic bench</td>
<td>1</td>
</tr>
<tr>
<td>- A wind turbine system</td>
<td></td>
</tr>
<tr>
<td>- A hydroelectric power bench</td>
<td>1</td>
</tr>
<tr>
<td>- A battery storage system</td>
<td>1</td>
</tr>
<tr>
<td>- A transmission line model</td>
<td>1</td>
</tr>
<tr>
<td>- A comprehensive protection relay system</td>
<td>1</td>
</tr>
<tr>
<td>- A reactive power compensation system</td>
<td>1</td>
</tr>
<tr>
<td>- A smart metering system</td>
<td></td>
</tr>
<tr>
<td>- A model of underground cables</td>
<td>1</td>
</tr>
<tr>
<td>- An 11 kv / 11 kv switchboard</td>
<td>1</td>
</tr>
<tr>
<td>model with protection relay system, measurement and control</td>
<td>1</td>
</tr>
<tr>
<td>- 11 kv / 480 v distribution transformer with associated protection relay system, measurement and control</td>
<td>1</td>
</tr>
<tr>
<td>- An external low voltage distribution model</td>
<td>2</td>
</tr>
<tr>
<td>- All necessary measuring instruments</td>
<td></td>
</tr>
<tr>
<td><strong>Accessories</strong></td>
<td></td>
</tr>
<tr>
<td>- Mobile experiment stand, sockets, Power supply, flat screen Monitor.</td>
<td>5</td>
</tr>
<tr>
<td>- Printer</td>
<td>1</td>
</tr>
<tr>
<td>- Safety instructions flyers</td>
<td></td>
</tr>
<tr>
<td><strong>Software</strong></td>
<td>Lot</td>
</tr>
<tr>
<td>Integrated software and scada system</td>
<td></td>
</tr>
<tr>
<td><strong>Training</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Train the trainer program for 4 EEHC employees.</strong></td>
<td>1</td>
</tr>
</tbody>
</table>
This training should address at least the following topics:

- Smart Grid system and energy management
- ENR generation (Wind, Solar)
- Batteries storage
- Voltage control
- Communication and SCADA protocol
- Protection systems
- Consumption, Active and Dynamic Loads, Reactive Power Compensation
- Cyber security
- Application and Case studies on EEHC own network

Practical training should represent more than 70% of the train the trainer program.

Workbooks containing project-oriented exercises need to be provided during the training and use by EEHC for future internal training.
2. SCADA Lab

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td><strong>Smart Grid SCADA System</strong></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Comprising the Following:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Software SCADA for power Lab, control, Designer and Developer software</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(<em>SCADA Panel Designer, SCADA NET, SCADA PLC, SCADA LOGGER</em>)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC Computer Core i7 with 2x23” LED</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td><strong>SCADA Lab Station Application (Generation)</strong></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Comprising the Following:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Equipment set comprising the following:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Three-Phase synchronous machine with smooth core rotor</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Three-Phase synchronous machine with Salient pole</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Exciter voltage controller with de-excitation</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Servo-drive/braking system (Turbine)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Servo machine test bench for 1kw machines incl. software</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Rubber coupling sleeve, 1kw</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Coupling guard, 1kw</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Shaft end guard, 1kw</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Power switch module</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Synchronization unit</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>HMI (Human Machine Interface) for generators</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Variable Ohmic load, three-phase, 1kw</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Inductive load, three-phase, 1kw</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Protection Relayes for Generators</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multi-function relay, power controller, cos-phi controller, Synchronizing unit</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Transformer/Generator differential protection relay</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Rotor-earth fault relay</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Motor protection switch, 3 pole, 1.6-2.5A</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Media</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interactive lab Assistant : AC Synchronization and Automatic Generator control</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Interactive lab Assistant : Pumped-storage power station</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Interactive lab Assistant : control of stand-alone networks with Micro Grid</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Interactive lab Assistant : Generator protection</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Power Supply:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Universal power supply for DC and three-phase current</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Measuring Instruments:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Three-Phase Smart Power Quality Meter with display and long-term memory</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Accessories:</strong></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Quantity</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Safety connecting plug 4mm with tap (2x), black, 1000V/32A CAT II</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Safety connecting plug 4mm with tap (2x), blue, 1000V/32A CAT II</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Safety connecting plug 4mm with tap (2x), green/yellow, 1000V/32A CAT II</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Set of Safety measurement cables, 4mm (31 leads)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mobile aluminum experiment stand, 3 levels, 6x earthed socket, 1250x700x1955 mm</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Wall or aluminum-profile mounting cable storage for 48 cables</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PC holder for Syba experiment trolleys, height and width adjustable</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Monitor holder for flat screen monitor of weight up to 15kg</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Keyboard adapter for flat screen monitor holders</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Protection cover for three-level experiment trolleys</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PC computer core i7 with 23” LED</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>1.3 SCADA Lab Station Application (Distribution)</strong></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Comprising the Following:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equipment set comprising the following:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double busbar unit, three-phase, incoming/outgoing feeder</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Double busbar unit, three-phase, coupler panel</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Transmission line Model 150km/300km</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Underground cables model</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>11 kv/11kv distribution panel model with related protection device, metering and control</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>11 kv/480 v distribution transformer (Kiosk) model with related protection device, metering and control</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Outdoor low voltage distribution pillar model</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Time Overcurrent relay</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ohmic load 3x 560 Ohm</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Power Supply:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjustable 3-phase power supply, 0-450V/2A</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Power switch module</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Measuring Instruments:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All the needed measuring instruments including:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three-Phase Smart Power Quality Meter, display and long-term memory</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Media</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactive lab Assistant : Smart Grid</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Interactive lab Assistant : busbar systems</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Interactive lab Assistant : High-voltage transmission lines</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Interactive lab Assistant : Protective systems for high-voltage transmission line</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Accessories:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patch cable set Cat6E</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>5-port Ethernet switch</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Safety connecting plug 4mm with tap (2x), black, 1000V/32A CAT II</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>
### Section VII. Cahier des Clauses Administratives Générales

#### 1.4 SCADA Lab Station Application (Energy Management)

**Comprising the Following: (including different types of loads)**

**Equipment set comprising the following:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamp board 230V</td>
<td>1</td>
</tr>
<tr>
<td>Inductive load, three-phase, 1kw</td>
<td>1</td>
</tr>
<tr>
<td>Capacitive load, three-phase, 1kw</td>
<td>1</td>
</tr>
<tr>
<td>Variable Ohmic load, three-phase, 1kw</td>
<td>1</td>
</tr>
<tr>
<td>Three-phase asynchronous motor, squirrel-cage, 1kw</td>
<td>1</td>
</tr>
<tr>
<td>Star-Delta switch</td>
<td>1</td>
</tr>
<tr>
<td>Reactive power controller</td>
<td>1</td>
</tr>
<tr>
<td>Switchable Capacitor Battery</td>
<td>1</td>
</tr>
</tbody>
</table>

**Additionally required, dynamic servo machine test stand:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Servo machine test bench for 1kw machines incl. software</td>
<td>1</td>
</tr>
<tr>
<td>Rubber coupling sleeve, 1kw</td>
<td>1</td>
</tr>
<tr>
<td>Coupling guard, 1kw</td>
<td>1</td>
</tr>
<tr>
<td>Quick chart, servo-machine test stand safety and operating instructions(GB)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Power Supply:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal power supply for electrical machines</td>
<td>1</td>
</tr>
<tr>
<td>Motor protection switch, 3pole, 1.8-2.5A</td>
<td>1</td>
</tr>
<tr>
<td>Power Switch module</td>
<td>2</td>
</tr>
</tbody>
</table>

**Measuring Instruments:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-Phase Smart Power Quality Meter, display and long-term memory</td>
<td>2</td>
</tr>
</tbody>
</table>

**Media**

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive lab Assistant : Energy Management</td>
<td>1</td>
</tr>
<tr>
<td>Interactive lab Assistant : Asynchronous machines 0.3/1kw</td>
<td>1</td>
</tr>
</tbody>
</table>

**Accessories:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patch cable set Cat6E</td>
<td>1</td>
</tr>
<tr>
<td>Item</td>
<td>Quantity</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>5-port Ethernet switch</td>
<td>1</td>
</tr>
<tr>
<td>Safety connecting plug 4mm with tap (2x), black, 1000V/32A CAT II</td>
<td>40</td>
</tr>
<tr>
<td>Safety connecting plug 4mm with tap (2x), blue, 1000V/32A CAT II</td>
<td>5</td>
</tr>
<tr>
<td>Safety connecting plug 4mm with tap (2x), green/yellow, 1000V/32A CAT II</td>
<td>5</td>
</tr>
<tr>
<td>Set of Safety measurement cables, 4mm (31 leads)</td>
<td>1</td>
</tr>
<tr>
<td>Safety measurement cable (4mm), 150cm, brown</td>
<td>2</td>
</tr>
<tr>
<td>Safety measurement cable (4mm), 150cm, black</td>
<td>2</td>
</tr>
<tr>
<td>Safety measurement cable (4mm), 150cm, grey</td>
<td>2</td>
</tr>
<tr>
<td>Safety measurement cable (4mm), 150cm, blue</td>
<td>2</td>
</tr>
<tr>
<td>Mobile aluminum experiment stand, 3 levels, 6x earthed socket, 1250x700x1955 mm</td>
<td>1</td>
</tr>
<tr>
<td>Wall or aluminum-profile mounting cable storage for 48 cables</td>
<td>1</td>
</tr>
<tr>
<td>PC holder for Syba experiment trolleys, height and width adjustable</td>
<td>1</td>
</tr>
<tr>
<td>Monitor holder for flat screen monitor of weight up to15kg</td>
<td>1</td>
</tr>
<tr>
<td>Keyboard adapter for flat screen monitor holders</td>
<td>1</td>
</tr>
<tr>
<td>Protection cover for three-level experiment trolleys</td>
<td>1</td>
</tr>
<tr>
<td>PC computer core i7 with 23” LED</td>
<td>1</td>
</tr>
<tr>
<td>Laser jet printer</td>
<td>LOT</td>
</tr>
<tr>
<td>Lab safety instructions (boards and signs)</td>
<td>LOT</td>
</tr>
</tbody>
</table>

**Drawings**

None
6- LOT 6

6.1 List of Goods

<table>
<thead>
<tr>
<th>Name of Goods</th>
<th>Brief Description</th>
<th>Quantity</th>
</tr>
</thead>
</table>
| Turnkey Photovoltaic Platform for (STEG) in Tunisia | The photovoltaic platform includes:  
- One photovoltaic solar plant connected to a local grid  
- One software to analyse and simulate the power system | 1 |

<table>
<thead>
<tr>
<th>Name of Related Service</th>
<th>Brief Description</th>
<th>Quantity</th>
</tr>
</thead>
</table>
| Training | Train the trainer program for 2 employees of STEG in French and in Tunis:  
- How to use the Platform  
- Energy Efficiency Technologies  
Training should cover at minima:  
- Platform installation and description of the main equipment  
- Principle of solar generation and storage technologies  
- Use of simulation software to perform studies for generation and storage or renewable energy with practical example on the platform.  
- Energy Efficiency Technologies  
Practical training should represent more than 70% of the train the trainer program.  
Workbooks containing project-oriented exercises need to be provided during the training and use by STEG for future internal training. | 1 |
6.2 -Delivery and Completion Schedule

- Location: STEG : BP01 Khlédia 2054 Ben Arous, Tunisie

The delivery period for the two pieces of equipment is three (3) months from the date of signature of the contract.
### 6.3 Technical Specifications

<table>
<thead>
<tr>
<th>Technical Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipments</strong></td>
<td></td>
</tr>
<tr>
<td>Turnkey Photovoltaic Platform comprising:</td>
<td></td>
</tr>
<tr>
<td>Monocrystalline PV module 100 to 250 Wc</td>
<td>2</td>
</tr>
<tr>
<td>Multicrystalline PV module 100 to 250 Wc</td>
<td>2</td>
</tr>
<tr>
<td>DC box with surge arrester and fuse</td>
<td>1</td>
</tr>
<tr>
<td>AC box with surge arrester</td>
<td>1</td>
</tr>
<tr>
<td>Solar cable 6 mm²</td>
<td>1</td>
</tr>
<tr>
<td>Solar cable 10 mm²</td>
<td>1</td>
</tr>
<tr>
<td>Set of MC4 plug-in connectors</td>
<td>30</td>
</tr>
<tr>
<td>Complete kit for 1 kWp installation in single phase</td>
<td>1</td>
</tr>
<tr>
<td>Complete kit for a 5 kWp three-phase installation</td>
<td>1</td>
</tr>
<tr>
<td>Monitoring system &quot;Production monitoring&quot; from the inverter manufacturer</td>
<td>1</td>
</tr>
<tr>
<td>Monitoring system &quot;Performance monitoring&quot;</td>
<td>1</td>
</tr>
<tr>
<td>Aluminum structure 1 kWp installation of fixed type with ballast, bolts / screws, etc.</td>
<td>2</td>
</tr>
<tr>
<td>Aluminum structure 5 kWp installation of fixed type with ballast, bolts / screws, etc.</td>
<td>2</td>
</tr>
<tr>
<td><strong>Measure and electrical toolbox</strong></td>
<td></td>
</tr>
<tr>
<td>Electrician Toolbox 1 wire stripper, 1 wire cutter, 1 power strip pliers, 2 flat screwdrivers, 2 screwdrivers, 1 double tape measure, 1 small hammer, wrench set 6,8,10,12,13, key set ALLEN, key torque set</td>
<td>3</td>
</tr>
<tr>
<td>Drill, rechargeable screwdriver</td>
<td>1</td>
</tr>
<tr>
<td>Crimping tool &quot;special PV connector&quot; MC4 crimping pliers with all accessories (clamping connectors, unlocking, etc.)</td>
<td>2</td>
</tr>
<tr>
<td>Multimeter CA-CC-10 A Max voltage DC 600 V</td>
<td>4</td>
</tr>
<tr>
<td>Multimeter CA-CC-10 A Max voltage DC 1000 V: ex. BERNER UT58B</td>
<td>4</td>
</tr>
<tr>
<td>Pair of additional cords for multimeters with MC4 tip</td>
<td>4</td>
</tr>
<tr>
<td>Current clamp CA-CC 40 A Max voltage 600 V or 1000 V ex. BK Precision 316 or Chauvin Arnoux F05</td>
<td>4</td>
</tr>
<tr>
<td>Megohmometer with retractable tip Ex. Chauvin Arnoux CA 6521</td>
<td>1</td>
</tr>
<tr>
<td>Tellurometer Ex. Chauvin Arnoux CA 6555</td>
<td>1</td>
</tr>
<tr>
<td>Item Description</td>
<td>Quantity</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Auxiliary earth Rod for measurement with tellurometer</td>
<td>2</td>
</tr>
<tr>
<td>Earth meter controller Ex. CATU DT 300</td>
<td>2</td>
</tr>
<tr>
<td>DDR tester Ex. CATU DT110</td>
<td>1</td>
</tr>
<tr>
<td>Compass simple ex. RECTA P6</td>
<td>3</td>
</tr>
<tr>
<td>Inclinometer and compass ex: SUNTOO tandem or RECTA DP10</td>
<td>3</td>
</tr>
<tr>
<td>Clinometer alone SUNTOO PM5 360</td>
<td>3</td>
</tr>
<tr>
<td>Sun measuring cell or solarimeter. Ex: Spectron 210 TRITEC or SEAWARD SOLAR</td>
<td>2</td>
</tr>
<tr>
<td>2-way digital thermometer and thermocouple probes ambiance and contact Ex. Brand KIMO TK112 two way with two temperature probes</td>
<td>1</td>
</tr>
<tr>
<td>Portable device: mask analyser integrated camera with fish eye camera, compass, software, touchscreen, integrated GPS</td>
<td>1</td>
</tr>
<tr>
<td>Curve analyser. Ex: TRIKA SEN (TRITEK brand) or SOMMETRIC PVA-1000S (spec 30 to 1000 V DC and mini 15 A) or HT Italia I-V400</td>
<td>1</td>
</tr>
<tr>
<td>Solar Installation Test Kits: earth measurement, Uoc, Isc, insulation resistance, etc.</td>
<td>1</td>
</tr>
<tr>
<td>PV tester for single or three phase installation (AC and DC side measurements) (Isc, Uoc, RISO, AC quality network, power measurement, etc.)</td>
<td>1</td>
</tr>
<tr>
<td>Illuminance sensor, temperature sensor, etc. with dataloger and tracking software, metering</td>
<td>1</td>
</tr>
</tbody>
</table>

**Workplace safety equipment**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lots of 24 Work Gloves Basic Protective Gloves (Lightweight)</td>
<td>1</td>
</tr>
<tr>
<td>Markup tape roll (white and red) roll of 5cm x 100m</td>
<td>2</td>
</tr>
<tr>
<td>Halyard 11mm - 10m</td>
<td>2</td>
</tr>
<tr>
<td>Halyard 11mm - 20m</td>
<td>2</td>
</tr>
<tr>
<td>Strap ring</td>
<td>8</td>
</tr>
<tr>
<td>Stop-fall CT SKR (11 mm)</td>
<td>4</td>
</tr>
<tr>
<td>Screw or automatic connector</td>
<td>12</td>
</tr>
<tr>
<td>Helmet</td>
<td>12</td>
</tr>
<tr>
<td>Pair of insulating gloves 5000V</td>
<td>2</td>
</tr>
<tr>
<td>Checker lack of tension ex. CATU MS917 (max DC up to 750 V) and AC max 690 V, IP2X.</td>
<td>2</td>
</tr>
</tbody>
</table>

**Audiovisual and computer equipment**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video projector</td>
<td>1</td>
</tr>
<tr>
<td>Digital camera Wide angle with Zoom (min 10) and SD card</td>
<td>1</td>
</tr>
<tr>
<td>Equipment</td>
<td>Quantity</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Laptop</td>
<td>6</td>
</tr>
<tr>
<td>Color Laser Printer, Multifunction Copier</td>
<td>1</td>
</tr>
<tr>
<td>Basic solar calculator</td>
<td>12</td>
</tr>
</tbody>
</table>

**Software**

Licenses of a software (PVSYST) allowing:
- The sizing of the system
- Shading modeling
- Simulation and results report
  - Full Generation
  - Performance ratio (PR [%])
  - Etc.

6
None
Scope of Supply of Plant and Installation Services by the Contractor
Specification
Forms and Procedures

Completion Certificate

Operational Acceptance Certificate

Change Order Procedures

Other Procedures (if any; e.g. Commissioning Procedures)
Form of Completion Certificate

Date: ____________________  
Loan/Credit №: ________________  
IFB №: ________________

[Name of Contract]

To: [Name and address of Contractor]

Dear Sirs,

Pursuant to GC Clause 4.8 (Completion of the Facilities) of the General Conditions entered into between yourselves and the Employer dated [date], relating to the [brief description of the Facilities], we hereby notify you that the following part(s) of the Facilities was (were) complete on the date specified below, and that, in accordance with the terms of the Contract, the Employer hereby takes over the said part(s) of the Facilities, together with the responsibility for care and custody and the risk of loss thereof on the date mentioned below.

1. Description of the Facilities or part thereof: [description]

2. Date of Completion: [date]

However, you are required to complete the outstanding items listed in the attachment hereto as soon as practicable.

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor of your obligations during the Defect Liability Period.

Yours faithfully,

Title  
(Project Manager)
Form of Operational Acceptance Certificate

Date: 
Loan/Credit N°: 
IFB N°: 

[Name of Contract]

To: [Name and address of Contractor]

Dear Sirs,

Pursuant to GC Clause 4.9.6 (Operational Acceptance) of the General Conditions entered into between yourselves and the Employer dated [date], relating to the [brief description of the Facilities], we hereby notify you that the Functional Guarantees of the following part(s) of the Facilities were satisfactorily attained on the date specified below.

1. Description of the Facilities or part thereof: [description]

2. Date of Operational Acceptance: [date]

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor of your obligations during the Defect Liability Period.

Yours faithfully,

Title
(Project Manager)
Change Order Procedure and Forms

Date: ____________________
Loan/Credit N°: ____________________
IFB N°: ____________________

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2. Change Order Log
3. References for Changes

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Annex 2 Estimate for Change Proposal
Annex 3 Acceptance of Estimate
Annex 4 Change Proposal
Annex 5 Change Order
Annex 6 Pending Agreement Change Order
Annex 7 Application for Change Proposal
Change Order Procedure

1. **General**

   This section provides samples of procedures and forms for implementing changes in the Facilities during the performance of the Contract in accordance with GC Clause 7.1(Change in the Facilities) of the General Conditions.

2. **Change Order Log**

   The Contractor shall keep an up-to-date Change Order Log to show the current status of Requests for Change and Changes authorized or pending, as Annex 8. Entries of the Changes in the Change Order Log shall be made to ensure that the log is up-to-date. The Contractor shall attach a copy of the current Change Order Log in the monthly progress report to be submitted to the Employer.

3. **References for Changes**

   (1) Request for Change as referred to in GC Clause 7.1.5 shall be serially numbered CR-X-nnn.

   (2) Estimate for Change Proposal as referred to in GC Clause 7.1.6 shall be serially numbered CN-X-nnn.

   (3) Acceptance of Estimate as referred to in GC Clause 7.1.6(a) shall be serially numbered CA-X-nnn.

   (4) Change Proposal as referred to in GC Clause 7.1.7 shall be serially numbered CP-X-nnn.

   (5) Change Order as referred to in GC Clause 7.1.10 shall be serially numbered CO-X-nnn.

   **Note:** (a) Requests for Change issued from the Employer’s Home Office and the Site representatives of the Employer shall have the following respective references:

   - Site: CR-S-nnn

   The above number “nnn” is the same for Request for Change, Estimate for Change Proposal, Acceptance of Estimate, Change Proposal and Change Order.
Annex 1. Request for Change Proposal

(Employer’s Letterhead)

To: [Contractor’s name and address]  
Date: ________________

Attention: [Name and title]

Contract Name: [Contract name]  
Contract Number: [Contract number]

Dear Sirs,

With reference to the captioned Contract, you are requested to prepare and submit a Change Proposal for the Change noted below in accordance with the following instructions within [number] days of the date of this letter[or on or before (date)].

1. Title of Change: [Title]

2. Change Request No./Rev.: [Number]

3. Originator of Change: Employer: [Name]  
   Contractor (by Application for Change Proposal No. [Number])  

4. Brief Description of Change: [Description]

5. Facilities and/or Item No. of equipment related to the requested Change: [Description]

6. Reference drawings and/or technical documents for the request of Change:
   
<table>
<thead>
<tr>
<th>Drawing No./Document No.</th>
<th>Description</th>
</tr>
</thead>
</table>

7. Detailed conditions or special requirements on the requested Change: [Description]

8. General Terms and Conditions:
(a) Please submit your estimate to us showing what effect the requested Change will have on the Contract Price.

(b) Your estimate shall include your claim for the additional time, if any, for completion of the requested Change.

(c) If you have any opinion negative to the adoption of the requested Change in connection with the conformability to the other provisions of the Contract or the safety of the Plant or Facilities, please inform us of your opinion in your proposal of revised provisions.

(d) Any increase or decrease in the work of the Contractor relating to the services of its personnel shall be calculated.

(e) You shall not proceed with the execution of the work for the requested Change until we have accepted and confirmed the amount and nature in writing.

________________________________________________________________________

(Employer’s Name)

________________________________________________________________________

(Signature)

________________________________________________________________________

(Name of signatory)

________________________________________________________________________

(Title of signatory)
Annex 2. Estimate for Change Proposal

(Contractor’s Letterhead)

To: [Employer’s name and address] Date: __________________

Attention: [Name and title]

Contract Name: [Contract name]
Contract Number: [Contract number]

Dear Sirs,

With reference to your Request for Change Proposal, we are pleased to notify you of the approximate cost of preparing the below-referenced Change Proposal, in accordance with GC Clause 7.1.6. We acknowledge that your agreement to the cost of preparing the Change Proposal, in accordance with GC Clause 7.1.6(a), is required before estimating the cost for change work.

1. Title of Change: [Title]

2. Change Request No./Rev.: [Number]

3. Brief Description of Change: [Description]

4. Scheduled Impact of Change: [Description]

5. Cost for Preparation of Change Proposal: [Cost]

   (a) Engineering

      (i) Engineer ____ hrs x ____ rate/hr = ____

      (ii) Draftsperson ____ hrs x ____ rate/hr = ____

      Sub-total ____ hrs

      Total Engineering Cost ____

   (b) Other Cost ____

   Total Cost (a) + (b) ____

---

18 Costs shall be in the currencies of the Contract.
Section VI. Requirements

(Contractor’s Name)

(Signature)

(Name of signatory)

(Title of signatory)
Annex 3. Acceptance of Estimate

To: [Contractor’s name and address]  
Date: ________________

Attention: [Name and title]

Contract Name: [Contract name]
Contract Number: [Contract number]

Dear Sirs,

We hereby accept your Estimate for Change Proposal and agree that you should proceed with the preparation of the Change Proposal.

1. Title of Change: [Title]

2. Change Request No./Rev.: [Request number/revision]

3. Estimate for Change Proposal No./Rev.: [Proposal number/revision]

4. Acceptance of Estimate No./Rev.: [Estimate number/revision]

5. Brief Description of Change: [Description]

6. Other Terms and Conditions: In the event that we decide not to order the Change accepted, you shall be entitled to compensation for the cost of preparation of Change Proposal described in your Estimate for Change Proposal mentioned in Paragraph 3 above, in accordance with GC Clause 7.1.10.

________________________________________
(Employer’s Name)

________________________________________
(Signature)

________________________________________
(Name and Title of signatory)
Annex 4. Change Proposal

(Contractor’s Letterhead)

To: [Employer’s name and address]  
Date: ____________________

Attention: [Name and title]

Contract Name: [Contract name]  
Contract Number: [Contract number]

Dear Sirs,

In response to your Request for Change Proposal No. [Number], we hereby submit our proposal as follows:

1. Title of Change: [Name]

2. Change Proposal No./Rev.: [Proposal number/revision]

3. Originator of Change:  
   Employer: [Name]  
   Contractor: [Name]

4. Brief Description of Change: [Description]

5. Reasons for Change: [Reason]

6. Facilities and/or Item No. of Equipment related to the requested Change: [Facilities]

7. Reference drawings and/or technical documents for the requested Change:

<table>
<thead>
<tr>
<th>Drawing/Document No.</th>
<th>Description</th>
</tr>
</thead>
</table>

8. Estimate of increase/decrease to the Contract Price resulting from Change Proposal:¹⁹

   (Amount)

   (a) Direct material

   ____________________

¹⁹ Costs shall be in the currencies of the Contract.
(b) Major construction equipment .................................................................
(c) Direct field labour (Total ___ hrs) ..............................................................
(d) Subcontracts ................................................................................................
(e) Indirect material and labor ...........................................................................
(f) Site supervision ............................................................................................
(g) Head office technical staff salaries
    Process engineer    _____ hrs @ _____ rate/hr    __________
    Project engineer    _____ hrs @ _____ rate/hr    __________
    Equipment engineer  _____ hrs @ _____ rate/hr    __________
    Procurement         _____ hrs @ _____ rate/hr    __________
    Draftsperson        _____ hrs @ _____ rate/hr    __________
    Total               _____ hrs    __________
(h) Extraordinary costs (computer, travel, etc.) ..............................................
(i) Fee for general administration, ____ % of Items ........................................
(j) Taxes and customs duties ...........................................................................

Total lump sum cost of Change Proposal ......................................................
[Sum of items (a) to (j)] ...............................................................................

Cost to prepare Estimate for Change Proposal ...............................................
[Amount payable if Change is not accepted] ....................................................

9. Additional time for Completion required due to Change Proposal

10. Effect on the Functional Guarantees

11. Effect on the other terms and conditions of the Contract

12. Validity of this Proposal: within [Number] days after receipt of this Proposal by the Employer

13. Other terms and conditions of this Change Proposal:

    (a) You are requested to notify us of your acceptance, comments or rejection of this detailed Change Proposal within [Number] days from your receipt of this Proposal.
(b) The amount of any increase and/or decrease shall be taken into account in the adjustment of the Contract Price.

(c) Contractor’s cost for preparation of this Change Proposal:\(^2\)  
(Note) This cost shall be reimbursed by the Employer in case of Employer’s withdrawal or rejection of this Change Proposal without default of the Contractor, in accordance with GC Clause 7.1.10.

______________________________

(Contractor’s Name)

______________________________

(Signature)

______________________________

(Name of signatory)

______________________________

(Title of signatory)

\(^2\) Specify where necessary.
Annex 5. Change Order

(Employer’s Letterhead)

To: [Contractor’s name and address]  Date: ________________

Attention: [Name and title]

Contract Name: [Contract name]
Contract Number: [Contract number]

Dear Sirs,

We approve the Change Order for the work specified in the Change Proposal (No. [Number]), and agree to adjust the Contract Price, Time for Completion and/or other conditions of the Contract in accordance with GC Clause 7.1.10.

1. Title of Change: [Name]

2. Change Request No./Rev.: [Request number/revision]

3. Change Order No./Rev.: [Order number/revision]

4. Originator of Change:  Employer: [Name]
                           Contractor: [Name]

5. Authorized Price:

   Ref. No.: [Number]  Date: [Date]
   Foreign currency portion [Amount] plus Local currency portion [Amount]

6. Adjustment of Time for Completion

   None       Increase [Number] days       Decrease [Number] days

7. Other effects, if any

Authorized by: ___________________________  Date: ____________
              (Employer)

Accepted by: _____________________________  Date: ____________
            (Contractor)
Annex 6. Pending Agreement Change Order

(Employer’s Letterhead)

To: [Contractor’s name and address]  
Date: ________________

Attention: [Name and title]

Contract Name: [Contract name]  
Contract Number: [Contract number]

Dear Sirs,

We instruct you to carry out the work in the Change Order detailed below in accordance with GC Clause 7.1.10.

1. Title of Change: [Name]
2. Employer’s Request for Change Proposal No./Rev.: [Number/revision] dated: [Date]
3. Contractor’s Change Proposal No./Rev.: [Number/revision] dated: [Date]
4. Brief Description of Change: [Description]
5. Facilities and/or Item No. of equipment related to the requested Change: [Facilities]
6. Reference Drawings and/or technical documents for the requested Change:

<table>
<thead>
<tr>
<th>Drawing/Document No.</th>
<th>Description</th>
</tr>
</thead>
</table>

7. Adjustment of Time for Completion:
8. Other change in the Contract terms:
9. Other terms and conditions:

(Employer’s Name)
(Signature)

(Name of signatory)

(Title of signatory)
Annex 7. Application for Change Proposal

(Contractor’s Letterhead)

To: [Employer’s name and address]  
Date: __________________

Attention: [Name and title]

Contract Name: [Contract name]  
Contract Number: [Contract number]

Dear Sirs,

We hereby propose that the work mentioned below be treated as a Change in the Facilities.

1. Title of Change: [Name]

2. Application for Change Proposal No./Rev.: [Number/revision] dated: [Date]

3. Brief Description of Change: [Description]

4. Reasons for Change:

5. Order of Magnitude Estimation (in the currencies of the Contract):

6. Scheduled Impact of Change:

7. Effect on Functional Guarantees, if any:

8. Appendix:

__________________________
(Contractor’s Name)

__________________________
(Signature)

__________________________
(Name of signatory)

__________________________
(Title of signatory)
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PART 3 – Conditions of Contract and Contract Forms
## Section VII. General Conditions

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General Conditions

Introduction

[Name of Employer] _______
[Name of Contract] ________

These General Conditions (GC), read in conjunction with the Particular Conditions (PC) and other documents listed therein, constitute a complete document expressing the rights and obligations of the parties.


1.1 Definitions

In the Conditions of Contract (“these Conditions”), which include Particular Conditions, and these General Conditions, the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

1.1.1 The Contract

1.1.1.1 “Contract” means the Contract Agreement, the Letter of Acceptance, the Letter of Bid, these Conditions, the Specification, the Schedules, and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance.

1.1.1.2 “Contract Agreement” means the contract agreement referred to in Clause 1.1.1.1 [Contract Agreement].

1.1.1.3 “Letter of Acceptance” means the letter of formal acceptance, signed by the Employer, of the Letter of Bid, including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such letter of acceptance, the expression “Letter of Acceptance” means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.

1.1.1.4 “Letter of Bid” means the document entitled letter of bid, which was completed by the Contractor and includes the signed offer to the Employer, for the Plant.

1.1.1.5 “Specification” means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Plant.

1.1.1.6 “Drawings” means the drawings of the Plant, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Employer in accordance with the Contract.
1.1.1.7 “Schedules” means the document(s) entitled schedules, completed by the Contractor and submitted with the Letter of Bid, as included in the Contract. Such document may include the Bill of Quantities, data, lists, and schedules of rates and/or prices.

1.1.1.8 “Bid” means the Letter of Bid and all other documents which the Contractor submitted with the Letter of Bid, as included in the Contract.

1.1.2 Parties and Persons
1.1.2.1 “Party” means the Employer or the Contractor, as the context requires.
1.1.2.2 “Employer” means the person named as Employer in the Particular Conditions and the legal successors in title to this person.
1.1.2.3 “Contractor” means the person(s) named as contractor in the Letter of Bid accepted by the Employer, and the legal successors in title to this person(s).
1.1.2.4 “Project Manager” means the person appointed by the Employer in the manner provided in GC Clause 4.1.1 (Project Manager) hereof, and named as such in the PC to perform the duties delegated by the Employer.
1.1.2.5 “Contractor’s Representative” means any person nominated by the Contractor and approved by the Employer, in the manner provided in GC Clause 4.1.2 (Contractor’s Representative and Construction Manager) hereof, to perform the duties delegated by the Contractor.
1.1.2.6 “Subcontractor” means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Facilities, including preparation of any design or supply of any Plant, and the legal successors in title to each of these persons.
1.1.2.7 “Dispute Board” (DB) means the person or persons named as such in the PC appointed by agreement between the Employer and the Contractor to make a decision with respect to any dispute or difference between the Employer and the Contractor referred to him or her by the Parties pursuant to GC Clause 8.2.1 (Dispute Board) hereof.
1.1.2.8 “Bank” means the financing institution (if any) named in the PC.
1.1.2.9 “Borrower” means the person (if any) named as the borrower in the PC.

1.1.3 Dates, Tests, Periods and Completion
1.1.3.1 “Base Date” means the date 28 days prior to the latest date for submission of the Bid.
1.1.3.2 “Commencement Date” means the date notified under GC Clause 2.2.1 [Time for Commencement and Completion].
1.1.3.3 “Time for Completion” means the time within which Completion of the Facilities as a whole (or of a part of the Facilities where a separate Time for Completion of such part has been prescribed) is to be attained, as referred to in GC Clause 2.2.2 and in accordance with the relevant provisions of the Contract.
1.1.3.4 “Acceptance Test” means the tests (if any) which are specified in the Contract and which are carried out in accordance with the Specification for the purpose of issuing the “Operational Acceptance”.

Section VII. General Conditions
Section VII. General Conditions

1.1.3.5 “Operational Acceptance” means a certificate issued under GC Clause 4.9 (Commissioning and Operational Acceptance).

1.1.3.6 “day” means a calendar day and “year” means 365 days.

1.1.4 Money and Payments

1.1.4.1 “Contract Price” means the price defined in GC Clause 3.1 [The Contract Price], and includes adjustments in accordance with the Contract.

1.1.5 Works and Goods

1.1.5.1 “Contractor’s Equipment” means all facilities, apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor’s Equipment excludes Temporary Works, Employer’s Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Plant.

1.1.5.2 “Materials” means things of all kinds (other than Plant) intended to form or forming part of the Facilities, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.

1.1.5.3 “Plant” means permanent plant, equipment, machinery, apparatus, materials, articles and things of all kinds to be provided and incorporated in the Facilities by the Contractor under the Contract (including the spare parts to be supplied by the Contractor under GC Clause 2.1 hereof), but does not include Contractor’s Equipment.

1.1.5.4 “Installation Services” means all those services ancillary to the supply of the Plant for the Facilities, to be provided by the Contractor under the Contract, such as transportation and provision of marine or other similar insurance, inspection, expediting, site preparation works (including the provision and use of Contractor’s Equipment and the supply of all construction materials required), installation, testing, precommissioning, commissioning, operations, maintenance, the provision of operations and maintenance manuals, training, etc… as the case may require.

1.1.6 Other Definitions

1.1.6.1 “Contractor’s Documents” means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract.

1.1.6.2 “Country” means the country in which the Site (or most of it) is located.

1.1.6.3 “Force Majeure” is defined in GC Clause 6.7 [Force Majeure].

1.1.6.4 “Laws” means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.

1.1.6.5 “Performance Security” means the security (or securities, if any) under GC Clause 3.3.3 [Performance Security].
1.1.6.6 “Site” means the places where the Facilities are to be installed, including storage and working areas and to which Plant and Materials are to be delivered, and any other places as may be specified in the PC, as forming part of the Site.

1.1.6.7 “Unforeseeable” or “Unforeseen” means not reasonably foreseeable by an experienced Contractor, by the Base Date.

1.1.6.8 “Change Order” is defined in GC Clause 7.1 [Change in the Facilities]

1.2 Interpretation

1.2.1 Interpretation In the Contract, except where the context requires otherwise:

(a) words indicating one gender include all genders;
(b) words indicating the singular also include the plural and words indicating the plural also include the singular;
(c) provisions including the word “agree”, “agreed” or “agreement” require the agreement to be recorded in writing;
(d) “written” or “in writing” means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
(e) the word “tender” is synonymous with “bid” and “tenderer” with “bidder” and the words “tender documents” with “bidding documents”.

1.2.2 The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

1.2.3 Incoterms

Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of Parties thereunder shall be as prescribed by Incoterms.

Incoterms means international rules for interpreting trade terms published by the International Chamber of Commerce (latest edition), 38 Cours Albert 1er, 75008 Paris, France.

1.2.4 Entire Agreement

Subject to GC Clause 1.10 hereof, the Contract constitutes the entire agreement between the Employer and Contractor with respect to the subject matter of Contract and supersedes all communications, negotiations and agreements (whether written or oral) of Parties with respect thereto made prior to the date of Contract.

1.2.5 Amendment

No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each Party hereto.
1.2.6 **Independent Contractor**

The Contractor shall be an independent contractor performing the Contract. The Contract does not create any agency, partnership, joint venture or other joint relationship between the Parties hereto. Subject to the provisions of the Contract, the Contractor shall be solely responsible for the manner in which the Contract is performed. All employees, representatives or Subcontractors engaged by the Contractor in connection with the performance of the Contract shall be under the complete control of the Contractor and shall not be deemed to be employees of the Employer, and nothing contained in the Contract or in any subcontract awarded by the Contractor shall be construed to create any contractual relationship between any such employees, representatives or Subcontractors and the Employer.

1.2.7 **Non-Waiver**

Subject to this GC Clause 1.2.7, no relaxation, forbearance, delay or indulgence by either Party in enforcing any of the terms and conditions of the Contract or the granting of time by either Party to the other shall prejudice, affect or restrict the rights of that Party under the Contract, nor shall any waiver by either Party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

Any waiver of a Party’s rights, powers or remedies under the Contract must be in writing, must be dated and signed by an authorized representative of the Party granting such waiver, and must specify the right and the extent to which it is being waived.

1.2.8 **Severability**

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

1.2.9 **Country of Origin/Eligibility**

“Origin” means the place where the plant and component parts thereof are mined, grown, produced or manufactured, and from which the services are provided. Plant components are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that is substantially in its basic characteristics or in purpose or utility from its components. Eligibility is defined in the Bank’s **Rules and Procedures for Procurement of Goods and Works**.

1.3 **Communications**
1.3.1 Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests and discharges, these communications shall be:

(f) in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Particular Conditions; and

(g) delivered, sent or transmitted to the address for the recipient’s communications as stated in the Particular Conditions. However:

(h) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and

(i) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.

(j) Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party.

1.3.2 When a notice is issued to a Party, by the other Party or the Project Manager, a copy shall be sent to the Project Manager or the other Party, as the case may be.

1.4 Law and Language

1.4.1 The Contract shall be governed by the law of the country or other jurisdiction stated in the PC.

The ruling language of the Contract shall be that stated in the PC.

The language for communications shall be that stated in the PC. If no language is stated there, the language for communications shall be the ruling language of the Contract.

1.4.2 Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified, in which case, for purposes of interpretation of the Contract, this translation shall govern.

The Contractor shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Contractor.

1.5 Priority of Documents
1.5.1 The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

(k) the Contract Agreement (if any),
(l) the Letter of Acceptance,
(m) the Bid,
(n) the Particular Conditions,
(o) these General Conditions,
(p) the Specification,
(q) the Drawings, and
(r) the Schedules and any other documents forming part of the Contract.

If an ambiguity or discrepancy is found in the documents, the Project Manager shall issue any necessary clarification or instruction.

1.6 **Contract Agreement**

1.6.1 The Parties shall enter into a Contract Agreement within 28 days after the Contractor receives the Letter of Acceptance, unless the Particular Conditions establish otherwise. The Contract Agreement shall be based upon the form provided in Section IX, Contract Forms. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Employer.

1.7 **Assignment**

1.7.1 Neither Party shall assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, either Party:

(s) may assign the whole or any part with the prior agreement of the other Party, at the sole discretion of such other Party, and
(t) may, as security in favour of a bank or financial institution, assign its right to any moneys due, or to become due, under the Contract.

1.8 **License/Use of Technical Information**
1.8.1 For the operation and maintenance of the Plant, the Contractor hereby grants a non-exclusive and non-transferable license (without the right to sub-license) to the Employer under the patents, utility models or other industrial property rights owned by the Contractor or by a third Party from whom the Contractor has received the right to grant licenses thereunder, and shall also grant to the Employer a non-exclusive and non-transferable right (without the right to sub-license) to use the know-how and other technical information disclosed to the Employer under the Contract. Nothing contained herein shall be construed as transferring ownership of any patent, utility model, trademark, design, copyright, know-how or other intellectual property right from the Contractor or any third Party to the Employer.

1.8.2 The copyright in all drawings, documents and other materials containing data and information furnished to the Employer by the Contractor herein shall remain vested in the Contractor or, if they are furnished to the Employer directly or through the Contractor by any third Party, including suppliers of materials, the copyright in such materials shall remain vested in such third Party.

1.9 Contractor’s Use of Employer’s Documents

1.9.1 As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Employer. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Employer’s consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

1.10 Confidential Details

1.10.1 The Contractor’s and the Employer’s Personnel shall disclose all such confidential and other information as may be reasonably required in order to verify the Contractor’s compliance with the Contract and allow its proper implementation. Each of them shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out their respective obligations under the Contract or to comply with applicable Laws. Each of them shall not publish or disclose any particulars of the Plant prepared by the other Party without the previous agreement of the other Party. However, the Contractor shall be permitted to disclose any publicly available information, or information otherwise required to establish his qualifications to compete for other projects.
1.10.2 Notwithstanding the above, the Contractor may furnish to its Subcontractor(s) such documents, data and other information it receives from the Employer to the extent required for the Subcontractor(s) to perform its work under the Contract, in which event the Contractor shall obtain from such Subcontractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this Clause.

1.11 Compliance with Laws

1.11.1 The Contractor shall, in performing the Contract, comply with applicable Laws.

1.11.2 Unless otherwise stated in the Particular Conditions:

(u) the Employer shall acquire and pay for all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located, which (i) such authorities or undertakings require the Employer to obtain in the Employer’s name, and (ii) are necessary for the execution of the Contract, including those required for the performance by both the Contractor and the Employer of their respective obligations under the Contract;

(v) the Contractor shall acquire and pay for all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located which such authorities or undertakings require the Contractor to obtain in its name and which are necessary for the performance of the Contract, including, without limitation, visas for the Contractor’s and Subcontractor’s personnel and entry permits for all imported Contractor’s Equipment. The Contractor shall acquire all other permits, approvals and/or licenses that are not the responsibility of the Employer under GC Clause 1.11.2(a) hereof and that are necessary for the performance of the Contract. The Contractor shall indemnify and hold harmless the Employer from and against any and all liabilities, damages, claims, fines, penalties and expenses of whatever nature arising or resulting from the violation of such laws by the Employer its personnel, including the Subcontractors and their personnel, but without prejudice to GC Clause 2.4.1.

(w) If the Contractor is a joint venture, consortium, or association (JVCA) of two or more persons, all such persons shall be jointly and severally bound to the Employer for the fulfillment of the provisions of the Contract, unless otherwise specified in the PC, and shall designate one of such persons to act as a leader with authority to bind the JVCA. The composition or the constitution of the JVCA shall not be altered without the prior consent of the Employer.
1.13 **Inspections and Audit by the Bank**

1.13.1 The Contractor shall permit the Bank and/or persons appointed by the Bank to inspect the Site and/or the Contractor’s accounts and records relating to the performance of the Contract and to have such accounts and records audited by auditors appointed by the Bank if required by the Bank.

1.13.2 The Contractor shall maintain all documents and records related to the Contract for a period of three (3) years after completion of the Plant. The Contractor shall provide any documents necessary for the investigation of allegations of fraud, collusion, coercion, obstruction or corruption and require its employees or agents with knowledge of the Contract to respond to questions from the Bank.

1.14 **Fraud and Corruption**

1.14.1 It is the Bank’s policy to require that Borrowers (including beneficiaries of Bank Financing), as well as bidders, suppliers, and contractors, and their agents (whether declared or not), subcontractors, sub-consultants, service providers or suppliers, and any personnel thereof, observe the highest standard of ethics during the procurement and execution of Bank-financed contracts. In pursuance of this policy, the Bank:

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20. *In this context, any action to influence the procurement process or contract execution for undue advantage is improper.*
defines, for the purposes of this provision, the terms set forth below as follows:

(i) “Corrupt Practice” is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;

(ii) “Fraudulent Practice” is any act or omission, including a misrepresentation that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;

(iii) “Collusive Practice” is an arrangement between two or more parties, designed to achieve an improper purpose, including to influence improperly the actions of another party; and

(iv) “Coercive Practice” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;

(v) “obstructive practice” is

(v.1) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or

(v.2) acts intended to materially impede the exercise of the Bank’s inspection and audit rights provided for under clause 1.13 [Inspections and Audits by the Bank]

21 For the purpose of this sub-paragraph, “another party” refers to a public official acting in relation to the procurement process or contract execution. In this context, “public official” includes Bank staff and employees of other organizations taking or reviewing procurement decisions.

22 For the purpose of this sub-paragraph, “party” refers to a public official; the terms “benefit” and “obligation” relate to the procurement process or contract execution; and the “act or omission” is intended to influence the procurement process or contract execution.

23 For the purpose of this sub-paragraph, “parties” refers to participants in the procurement process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish bid prices at artificial, non-competitive levels, or are privy to each other’s bid prices or other conditions.

24 For the purpose of this sub-paragraph, “party” refers to a participant in the procurement process or contract execution.
(y) will reject a proposal for award if it determines that the bidder recommended for award or any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/or their employees, has, directly or indirectly, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;

(z) will declare misprocurement and cancel the portion of the Financing allocated to a contract if it determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of such Financing engaged in corrupt, fraudulent, collusive, coercive or obstructive practices during the procurement or the implementation of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;

(aa) will sanction a firm or individual, at any time, in accordance with the prevailing Bank’s sanctions procedures including by publicly declaring such firm or individual ineligible either indefinitely or for a stated period of time, (i) to be awarded Bank-financed contracts and (ii) to be a nominated sub-contractor, consultant, supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and

(bb) will require that a clause be included in bidding documents and in contracts financed by the Bank, requiring bidders, suppliers and contractors and their sub-contractors, agents, personnel, consultants, service providers, or suppliers to permit the Bank to inspect all accounts and records and other documents relating to the submission of bids and contract performance and to have them audited by auditors appointed by the Bank.

2. Subject Matter of Contract

2.1 Scope of Facilities

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25 A firm or an individual may be declared ineligible to be awarded a Bank financed contract: (i) upon completion of the Bank’s sanctions proceedings as per its sanctions procedures, including, inter alia, cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks, or otherwise decided by the Bank; and through the application of the Proposal for the Implementation of a Sanctions Process within the African Development Bank Group; and (ii) as a result of temporary suspension or early temporary suspension in connection with an on-going sanction proceeding. See footnote 18 and paragraph 9 of Appendix 1 of the Rules and Procedures for Procurement of Goods and Works.

26 A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding documents) is one which has either been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirement for the particular bid; or (ii) appointed by the Borrower.”
2.1.1 Unless otherwise expressly limited in the Employer’s Requirements, the Contractor’s obligations cover the provision of all Plant and the performance of all Installation Services required for the design, and the manufacture (including procurement, quality assurance, construction, installation, associated civil works, Precommissioning and delivery) of the Plant, and the installation, completion and commissioning of the Facilities in accordance with the plans, procedures, specifications, drawings, codes and any other documents as specified in Section VI, Employer’s Requirements. Such specifications include, but are not limited to, the provision of supervision and engineering services; the supply of labor, materials, equipment, spare parts (as specified in GC Clause 2.1.3 below) and accessories; Contractor’s Equipment; construction utilities and supplies; temporary materials, structures and facilities; transportation (including, without limitation, unloading and hauling to, from and at the Site); and storage, except for those supplies, works and services that will be provided or performed by the Employer, as set forth in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer.

2.1.2 The Contractor shall, unless specifically excluded in the Contract, perform all such work and/or supply all such items and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Completion of the Facilities as if such work and/or items and materials were expressly mentioned in the Contract.

2.1.3 In addition to the supply of Mandatory Spare Parts included in the Contract, the Contractor agrees to supply spare parts required for the operation and maintenance of the Facilities for the period specified in the PC and the provisions, if any, specified in the PC. However, the identity, specifications and quantities of such spare parts and the terms and conditions relating to the supply thereof are to be agreed between the Employer and the Contractor, and the price of such spare parts shall be that given in Price Schedule No. 6, which shall be added to the Contract Price. The price of such spare parts shall include the purchase price thereof and other costs and expenses (including the Contractor’s fees) relating to the supply of spare parts.

2.2 Time for Commencement and Completion

2.2.1 The Contractor shall commence work on the Facilities within the period specified in the PC and without prejudice to GC Clause 5.1.2 hereof, the Contractor shall thereafter proceed with the Facilities in accordance with the time schedule specified in the Appendix to the Contract Agreement titled Time Schedule.

2.2.2 The Contractor shall attain Completion of the Facilities or of a part where a separate time for Completion of such part is specified in the Contract, within the time stated in the PC or within such extended time to which the Contractor shall be entitled under GC Clause 7.2.1 hereof.

2.3 Contractor’s Responsibilities
2.3.1 The Contractor shall design, manufacture including associated purchases and/or subcontracting, install and complete the Facilities in accordance with the Contract. When completed, the Facilities should be fit for the purposes for which they are intended as defined in the Contract.

2.3.2 The Contractor confirms that it has entered into this Contract on the basis of a proper examination of the data relating to the Facilities including any data as to boring tests provided by the Employer, and on the basis of information that the Contractor could have obtained from a visual inspection of the Site if access thereto was available and of other data readily available to it relating to the Facilities as of the date twenty-eight (28) days prior to bid submission. The Contractor acknowledges that any failure to acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Facilities.

2.3.3 The Contractor shall acquire and pay for all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located which such authorities or undertakings require the Contractor to obtain in its name and which are necessary for the performance of the Contract, including, without limitation, visas for the Contractor’s and Subcontractor’s personnel and entry permits for all imported Contractor’s Equipment. The Contractor shall acquire all other permits, approvals and/or licenses that are not the responsibility of the Employer under GC Clause 2.4.3 hereof and that are necessary for the performance of the Contract.

2.3.4 The Contractor shall comply with all laws in force in the country where the Facilities are to be implemented. The laws will include all local, state, national or other laws that affect the performance of the Contract and bind upon the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any and all liabilities, damages, claims, fines, penalties and expenses of whatever nature arising or resulting from the violation of such laws by the Contractor or its personnel, including the Subcontractor’s and their personnel, but without prejudice to GC Clause 2.4.1 hereof.

2.3.5 Any Plant and Installation Services that will be incorporated in or be required for the Facilities and other supplies shall have their origin as specified under GC Clause 1.2.9 (Country of Origin/Eligibility). Any subcontractors retained by the Contractor shall be from a country as specified in GC Clause 1.2.9 (Country of Origin/Eligibility).

2.3.6 The Contractor shall permit the Bank to inspect the Contractor’s accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Bank, if so required by the Bank.
2.3.7 If the Contractor is a joint venture, consortium, or association (JVCA) of two or more persons, all such persons shall be jointly and severally bound to the Employer for the fulfillment of the provisions of the Contract, unless otherwise specified in the PC, and shall designate one of such persons to act as a leader with authority to bind the JVCA. The composition or the constitution of the JVCA shall not be altered without the prior consent of the Employer.

2.4 Employer’s Responsibilities

2.4.1 All information and/or data to be supplied by the Employer as described in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, shall be deemed to be accurate, except when the Employer expressly states otherwise.

2.4.2 The Employer shall be responsible for acquiring and providing legal and physical possession of the Site and access thereto, and for providing possession of and access to all other areas reasonably required for the proper execution of the Contract, including all requisite rights of way, as specified in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer. The Employer shall give full possession of and accord all rights of access thereto on or before the date(s) specified in that Appendix.

2.4.3 The Employer shall acquire and pay for all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located which (a) such authorities or undertakings require the Employer to obtain in the Employer’s name, (b) are necessary for the execution of the Contract, including those required for the performance by both the Contractor and the Employer of their respective obligations under the Contract, and (c) are specified in the Appendix (Scope of Works and Supply by the Employer).

2.4.4 If requested by the Contractor, the Employer shall use its best endeavors to assist the Contractor in obtaining in a timely and expeditious manner all permits, approvals and/or licenses necessary for the execution of the Contract from all local, state or national government authorities or public service undertakings that such authorities or undertakings require the Contractor or Subcontractors or the personnel of the Contractor or Subcontractors, as the case may be, to obtain.
2.4.5 Unless otherwise specified in the Contract or agreed upon by the Employer and the Contractor, the Employer shall provide sufficient, properly qualified operating and maintenance personnel; shall supply and make available all raw materials, utilities, lubricants, chemicals, catalysts, other materials and facilities; and shall perform all work and services of whatsoever nature, including those required by the Contractor to properly carry out Precommissioning, Commissioning and Guarantee Tests, all in accordance with the provisions of the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, at or before the time specified in the program furnished by the Contractor under GC Clause 4.2.2 hereof and in the manner thereupon specified or as otherwise agreed upon by the Employer and the Contractor.

2.4.6 The Employer shall be responsible for the continued operation of the Facilities after Completion, in accordance with GC Clause 4.8.8, and shall be responsible for facilitating the Guarantee Test(s) for the Facilities, in accordance with GC Clause 4.9.2.

2.4.7 All costs and expenses involved in the performance of the obligations under this GC Clause 2.4 shall be the responsibility of the Employer, save those to be incurred by the Contractor with respect to the performance of Guarantee Tests, in accordance with GC Clause 4.9.4.

2.4.8 In the event that the Employer shall be in breach of any of his obligations under this Clause, the additional cost incurred by the Contractor in consequence thereof shall be determined by the Project Manager and added to the Contract Price.

3. Payment

3.1 Contract Price

3.1.1 The Contract Price shall be as specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement.

3.1.2 Unless an adjustment clause is provided for in the PC, the Contract Price shall be a firm lump sum not subject to any alteration, except in the event of a Change in the Facilities or as otherwise provided in the Contract.

3.1.3 Subject to GC Clauses 2.3.2, 2.4.1 and 6.5 hereof, the Contractor shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.

3.2 Terms of Payment

3.2.1 The Contract Price shall be paid as specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement and in the Appendix to the Contract Agreement titled Terms and Procedures of Payment, which also outlines the procedures to be followed in making application for and processing payments.

3.2.2 No payment made by the Employer herein shall be deemed to constitute acceptance by the Employer of the Facilities or any part(s) thereof.
3.2.3 In the event that the Employer fails to make any payment by its respective due date or within the period set forth in the Contract, the Employer shall pay to the Contractor interest on the amount of such delayed payment at the rate(s) shown in the Appendix to the Contract Agreement titled Terms and Procedures of Payment, for the period of delay until payment has been made in full, whether before or after judgment or arbitrage award.

3.2.4 The currency or currencies in which payments are made to the Contractor under this Contract shall be specified in the Appendix to the Contract Agreement titled Terms and Procedures of Payment, subject to the general principle that payments will be made in the currency or currencies in which the Contract Price has been stated in the Contractor’s bid.

3.3 **Securities**

3.3.1 **Issuance of Securities**

The Contractor shall provide the securities specified below in favor of the Employer at the times, and in the amount, manner and form specified below.

3.3.2 **Advance Payment Security**

The Contractor shall, within twenty-eight (28) days of the notification of contract award, provide a security in an amount equal to the advance payment calculated in accordance with the Appendix to the Contract Agreement titled Terms and Procedures of Payment, and in the same currency or currencies.

The security shall be in the form provided in the bidding documents or in another form acceptable to the Employer. The amount of the security shall be reduced in proportion to the value of the Facilities executed by and paid to the Contractor from time to time, and shall automatically become null and void when the full amount of the advance payment has been recovered by the Employer. The security shall be returned to the Contractor immediately after its expiration.

3.3.3 **Performance Security**

The Contractor shall, within twenty-eight (28) days of the notification of contract award, provide a security for the due performance of the Contract in the amount specified in the PC.

3.3.4 The performance security shall be denominated in the currency or currencies of the Contract, or in a freely convertible currency acceptable to the Employer, and shall be in the form provided in Section IX, Contract Forms, corresponding to the type of bank guarantee stipulated by the Employer in the PC, or in another form acceptable to the Employer.
3.3.5 Unless otherwise specified in the PC, the security shall be reduced by half on the date of the Operational Acceptance. The Security shall become null and void, or shall be reduced pro rata to the Contract Price of a part of the Facilities for which a separate Time for Completion is provided, five hundred and forty (540) days after Completion of the Facilities or three hundred and sixty five (365) days after Operational Acceptance of the Facilities, whichever occurs first; provided, however, that if the Defects Liability Period has been extended on any part of the Facilities pursuant to GC Clause 5.2.8 hereof, the Contractor shall issue an additional security in an amount proportionate to the Contract Price of that part. The security shall be returned to the Contractor immediately after its expiration, provided, however, that if the Contractor, pursuant to GC Clause 5.2.10, is liable for an extended defect liability obligation, the performance security shall be extended for the period specified in the PC pursuant to GC Clause 5.2.10 and up to the amount specified in the PC.

3.3.6 The Employer shall not make a claim under the Performance Security, except for amounts to which the Employer is entitled under the Contract. The Employer shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Performance Security to the extent to which the Employer was not entitled to make the claim.

3.4 Taxes and Duties

3.4.1 Except as otherwise specifically provided in the Contract, the Contractor shall bear and pay all taxes, duties, levies and charges assessed on the Contractor, its Subcontractors or their employees by all municipal, state or national government authorities in connection with the Facilities in and outside of the country where the Site is located.

3.4.2 Notwithstanding GC Clause 3.4.1 above, the Employer shall bear and promptly pay

(a) all customs and import duties for the Plant specified in Price Schedule No. 1; and

(b) other domestic taxes such as, sales tax and value added tax (VAT) on the Plant specified in Price Schedules No. 1 and No. 2 and that is to be incorporated into the Facilities, and on the finished goods, imposed by the law of the country where the Site is located.

3.4.3 If any tax exemptions, reductions, allowances or privileges may be available to the Contractor in the country where the Site is located, the Employer shall use its best endeavors to enable the Contractor to benefit from any such tax savings to the maximum allowable extent.
3.4.4 For the purpose of the Contract, it is agreed that the Contract Price specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement is based on the taxes, duties, levies and charges prevailing at the date twenty-eight (28) days prior to the date of bid submission in the country where the Site is located (hereinafter called “Tax” in this GC Clause 3.4.4). If any rates of Tax are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of Contract, which was or will be assessed on the Contractor, Subcontractors or their employees in connection with performance of the Contract, an equitable adjustment of the Contract Price shall be made to fully take into account any such change by addition to the Contract Price or deduction there from, as the case may be, in accordance with GC Clause 6.6 hereof.

4 Execution of the Facilities

4.1 Representatives

4.1.1 Project Manager

If the Project Manager is not named in the Contract, then within fourteen (14) days of the Effective Date, the Employer shall appoint and notify the Contractor in writing of the name of the Project Manager. The Employer may from time to time appoint some other person as the Project Manager in place of the person previously so appointed, and shall give a notice of the name of such other person to the Contractor without delay. No such appointment shall be made at such a time or in such a manner as to impede the progress of work on the Facilities. Such appointment shall only take effect upon receipt of such notice by the Contractor. The Project Manager shall represent and act for the Employer at all times during the performance of the Contract. All notices, instructions, orders, certificates, approvals and all other communications under the Contract shall be given by the Project Manager, except as herein otherwise provided.

All notices, instructions, information and other communications given by the Contractor to the Employer under the Contract shall be given to the Project Manager, except as herein otherwise provided.
4.1.2 **Contractor’s Representative & Construction Manager**

If the Contractor’s Representative is not named in the Contract, then within fourteen (14) days of the Effective Date, the Contractor shall appoint the Contractor’s Representative and shall request the Employer in writing to approve the person so appointed. If the Employer makes no objection to the appointment within fourteen (14) days, the Contractor’s Representative shall be deemed to have been approved. If the Employer objects to the appointment within fourteen (14) days giving the reason therefor, then the Contractor shall appoint a replacement within fourteen (14) days of such objection, and the foregoing provisions of this GC Clause 4.1.2 shall apply thereto.

4.1.3 The Contractor’s Representative shall represent and act for the Contractor at all times during the performance of the Contract and shall give to the Project Manager all the Contractor’s notices, instructions, information and all other communications under the Contract.

All notices, instructions, information and all other communications given by the Employer or the Project Manager to the Contractor under the Contract shall be given to the Contractor’s Representative or, in its absence, its deputy, except as herein otherwise provided.

The Contractor shall not revoke the appointment of the Contractor’s Representative without the Employer’s prior written consent, which shall not be unreasonably withheld. If the Employer consents thereto, the Contractor shall appoint some other person as the Contractor’s Representative, pursuant to the procedure set out in GC Clause 4.1.2.

4.1.4 The Contractor’s Representative may, subject to the approval of the Employer which shall not be unreasonably withheld, at any time delegate to any person any of the powers, functions and authorities vested in him or her. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice signed by the Contractor’s Representative, and shall specify the powers, functions and authorities thereby delegated or revoked. No such delegation or revocation shall take effect unless and until a copy thereof has been delivered to the Employer and the Project Manager.

Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with this GC Clause 4.1.4 shall be deemed to be an act or exercise by the Contractor’s Representative.
4.1.5 From the commencement of installation of the Facilities at the Site until Completion, the Contractor’s Representative shall appoint a suitable person as the Construction Manager. The Construction Manager shall supervise all work done at the Site by the Contractor and shall be present at the Site throughout normal working hours except when on leave, sick or absent for reasons connected with the proper performance of the Contract. Whenever the Construction Manager is absent from the Site, a suitable person shall be appointed to act as the Construction Manager’s deputy.

4.1.6 The Employer may by notice to the Contractor object to any representative or person employed by the Contractor in the execution of the Contract who, in the reasonable opinion of the Employer, may behave inappropriately, may be incompetent or negligent, or may commit a serious breach of the Site regulations provided under GC Clause 4.6.20. The Employer shall provide evidence of the same, whereupon the Contractor shall remove such person from the Facilities.

4.1.7 If any representative or person employed by the Contractor is removed in accordance with GC Clause 4.1.6, the Contractor shall, where required, promptly appoint a replacement.

4.2 Work Programme

4.2.1 Contractor’s Organization

The Contractor shall supply to the Employer and the Project Manager a chart showing the proposed organization to be established by the Contractor for carrying out work on the Facilities within twenty-one (21) days of the Effective Date. The chart shall include the identities of the key personnel and the curricula vitae of such key personnel to be employed shall be supplied together with the chart. The Contractor shall promptly inform the Employer and the Project Manager in writing of any revision or alteration of such an organization chart.
4.2.2 **Program of Performance**

Within twenty-eight (28) days after the Effective Date, the Contractor shall submit to the Project Manager a detailed program of performance of the Contract, made in a form acceptable to the Project Manager and showing the sequence in which it proposes to design, manufacture, transport, assemble, install and precommission the Facilities, as well as the date by which the Contractor reasonably requires that the Employer shall have fulfilled its obligations under the Contract so as to enable the Contractor to execute the Contract in accordance with the program and to achieve Completion, Commissioning and Acceptance of the Facilities in accordance with the Contract. The program so submitted by the Contractor shall accord with the Time Schedule included in the Appendix to the Contract Agreement titled Time Schedule, and any other dates and periods specified in the Contract. The Contractor shall update and revise the program as and when appropriate or when required by the Project Manager, but without modification in the Times for Completion specified in the PC pursuant to GC Clause 2.2.2 and any extension granted in accordance with GC Clause 7.2, and shall submit all such revisions to the Project Manager.

4.2.3 **Progress Report**

The Contractor shall monitor progress of all the activities specified in the program referred to in GC Clause 4.2.2 above, and supply a progress report to the Project Manager every month.

The progress report shall be in a form acceptable to the Project Manager and shall indicate: (a) percentage completion achieved compared with the planned percentage completion for each activity; and (b) where any activity is behind the program, giving comments and likely consequences and stating the corrective action being taken.

4.2.4 **Progress of Performance**

If at any time the Contractor’s actual progress falls behind the program referred to in GC Clause 4.2.2, or it becomes apparent that it will so fall behind, the Contractor shall, at the request of the Employer or the Project Manager, prepare and submit to the Project Manager a revised program, taking into account the prevailing circumstances, and shall notify the Project Manager of the steps being taken to expedite progress so as to attain Completion of the Facilities within the Time for Completion under GC Clause 2.2.2, any extension thereof entitled under GC Clause 7.2.1, or any extended period as may otherwise be agreed upon between the Employer and the Contractor.
4.2.5 Procedures

The Contract shall be executed in accordance with the Contract Documents including the procedures given in the Forms and Procedures of the Employer’s Requirements.

The Contractor may execute the Contract in accordance with its own standard project execution plans and procedures to the extent that they do not conflict with the provisions contained in the Contract.

4.3 Subcontracting

4.3.1 The Appendix to the Contract Agreement titled List of Major Items of Plant and Installation Services and List of Approved Subcontractors, specifies major items of supply or services and a list of approved Subcontractors against each item, including manufacturers. Insofar as no Subcontractors are listed against any such item, the Contractor shall prepare a list of Subcontractors for such item for inclusion in such list. The Contractor may from time to time propose any addition to or deletion from any such list. The Contractor shall submit any such list or any modification thereto to the Employer for its approval in sufficient time so as not to impede the progress of work on the Facilities. Such approval by the Employer for any of the Subcontractors shall not relieve the Contractor from any of its obligations, duties or responsibilities under the Contract.

4.3.2 The Contractor shall select and employ its Subcontractors for such major items from those listed in the lists referred to in GC Clause 4.3.1.

4.3.3 For items or parts of the Facilities not specified in the Appendix to the Contract Agreement titled List of Major Items of Plant and Installation Services and List of Approved Subcontractors, the Contractor may employ such Subcontractors as it may select, at its discretion.

4.3.4 Each sub-contract shall include provisions which would entitle the Employer to require the sub-contract to be assigned to the Employer under GC Clause 4.3.5 (if and when applicable), or in event of termination by the Employer under GC Clause 7.4.2.

4.3.5 If a sub-contractor's obligations extend beyond the expiry date of the relevant Defects Liability Period and the Project Manager, prior to that date, instructs the Contractor to assign the benefits of such obligations to the Employer, then the Contractor shall do so.

4.4 Design and Engineering
4.4.1 Specifications and Drawings

The Contractor shall execute the basic and detailed design and the engineering work in compliance with the provisions of the Contract, or where not so specified, in accordance with good engineering practice.

The Contractor shall be responsible for any discrepancies, errors or omissions in the specifications, drawings and other technical documents that it has prepared, whether such specifications, drawings and other documents have been approved by the Project Manager or not, provided that such discrepancies, errors or omissions are not because of inaccurate information furnished in writing to the Contractor by or on behalf of the Employer.

4.4.2 The Contractor shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designated by or on behalf of the Employer, by giving a notice of such disclaimer to the Project Manager.

4.4.3 Codes and Standards

Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards current at the date twenty-eight (28) days prior to date of bid submission shall apply unless otherwise specified. During Contract execution, any changes in such codes and standards shall be applied subject to approval by the Employer and shall be treated in accordance with GC Clause 7.1.

4.4.4 Approval/Review of Technical Documents by Project Manager

The Contractor shall prepare or cause its Subcontractors to prepare, and furnish to the Project Manager the documents listed in the Appendix to the Contract Agreement titled List of Documents for Approval or Review, for its approval or review as specified and in accordance with the requirements of GC Clause 4.2.2 (Program of Performance).

Any part of the Facilities covered by or related to the documents to be approved by the Project Manager shall be executed only after the Project Manager’s approval thereof.

GC Clauses 4.4.5 through 4.4.10 shall apply to those documents requiring the Project Manager’s approval, but not to those furnished to the Project Manager for its review only.
4.4.5 Within fourteen (14) days after receipt by the Project Manager of any document requiring the Project Manager’s approval in accordance with GC Clause 4.4.4, the Project Manager shall either return one copy thereof to the Contractor with its approval endorsed thereon or shall notify the Contractor in writing of its disapproval thereof and the reasons thereof and the modifications that the Project Manager proposes.

If the Project Manager fails to take such action within the said fourteen (14) days, then the said document shall be deemed to have been approved by the Project Manager.

4.4.6 The Project Manager shall not disapprove any document, except on the grounds that the document does not comply with the Contract or that it is contrary to good engineering practice.

4.4.7 If the Project Manager disapproves the document, the Contractor shall modify the document and resubmit it for the Project Manager’s approval in accordance with GC Clause 4.4.5. If the Project Manager approves the document subject to modification(s), the Contractor shall make the required modification(s), whereupon the document shall be deemed to have been approved.

4.4.8 If any dispute or difference occurs between the Employer and the Contractor in connection with or arising out of the disapproval by the Project Manager of any document and/or any modification(s) thereto that cannot be settled between the Parties within a reasonable period, then such dispute or difference may be referred to a Dispute Board for determination in accordance with GC Clause 8.2.1 hereof. If such dispute or difference is referred to a Dispute Board, the Project Manager shall give instructions as to whether and if so, how, performance of the Contract is to proceed. The Contractor shall proceed with the Contract in accordance with the Project Manager’s instructions, provided that if the Dispute Board upholds the Contractor’s view on the dispute and if the Employer has not given notice under GC Clause 8.2.3 hereof, then the Contractor shall be reimbursed by the Employer for any additional costs incurred by reason of such instructions and shall be relieved of such responsibility or liability in connection with the dispute and the execution of the instructions as the Dispute Board shall decide, and the Time for Completion shall be extended accordingly.

4.4.9 The Project Manager’s approval, with or without modification of the document furnished by the Contractor, shall not relieve the Contractor of any responsibility or liability imposed upon it by any provisions of the Contract except to the extent that any subsequent failure results from modifications required by the Project Manager.
4.4.10 The Contractor shall not depart from any approved document unless the Contractor has first submitted to the Project Manager an amended document and obtained the Project Manager’s approval thereof, pursuant to the provisions of this GC Clause 4.4.

If the Project Manager requests any change in any already approved document and/or in any document based thereon, the provisions of GC Clause 7.1 shall apply to such request.

4.5 Procurement

4.5.1 Plant

Subject to GC Clause 3.4.2, the Contractor shall procure and transport all Plant in an expeditious and orderly manner to the Site.

4.5.2 Employer-Supplied Plant

If the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, provides that the Employer shall furnish any specific items to the Contractor, the following provisions shall apply:

4.5.3 The Employer shall, at its own risk and expense, transport each item to the place on or near the Site as agreed upon by the Parties and make such item available to the Contractor at the time specified in the program furnished by the Contractor, pursuant to GC Clause 4.2.2, unless otherwise mutually agreed.

4.5.4 Upon receipt of such item, the Contractor shall inspect the same visually and notify the Project Manager of any detected shortage, defect or default. The Employer shall immediately remedy any shortage, defect or default, or the Contractor shall, if practicable and possible, at the request of the Employer, remedy such shortage, defect or default at the Employer’s cost and expense. After inspection, such item shall fall under the care, custody and control of the Contractor. The provision of this GC Clause 4.5.4 shall apply to any item supplied to remedy any such shortage or default or to substitute for any defective item, or shall apply to defective items that have been repaired.

4.5.5 The foregoing responsibilities of the Contractor and its obligations of care, custody and control shall not relieve the Employer of liability for any undetected shortage, defect or default, nor place the Contractor under any liability for any such shortage, defect or default whether under GC Clause 5.2 or under any other provision of Contract.

4.5.6 Transportation

The Contractor shall at its own risk and expense transport all the materials and the Contractor’s Equipment to the Site by the mode of transport that the Contractor judges most suitable under all the circumstances.
4.5.7 Unless otherwise provided in the Contract, the Contractor shall be entitled to select any safe mode of transport operated by any person to carry the materials and the Contractor’s Equipment.

4.5.8 Upon dispatch of each shipment of materials and the Contractor’s Equipment, the Contractor shall notify the Employer by telex, cable, facsimile or electronic means, of the description of the materials and of the Contractor’s Equipment, the point and means of dispatch, and the estimated time and point of arrival in the country where the Site is located, if applicable, and at the Site. The Contractor shall furnish the Employer with relevant shipping documents to be agreed upon between the Parties.

4.5.9 The Contractor shall be responsible for obtaining, if necessary, approvals from the authorities for transportation of the materials and the Contractor’s Equipment to the Site. The Employer shall use its best endeavors in a timely and expeditious manner to assist the Contractor in obtaining such approvals, if requested by the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any claim for damage to roads, bridges or any other traffic facilities that may be caused by the transport of the materials and the Contractor’s Equipment to the Site.

4.5.10 Customs Clearance

The Contractor shall, at its own expense, handle all imported materials and Contractor’s Equipment at the point(s) of import and shall handle any formalities for customs clearance, subject to the Employer’s obligations under GC Clause 3.4.2, provided that if applicable laws or regulations require any application or act to be made by or in the name of the Employer, the Employer shall take all necessary steps to comply with such laws or regulations. In the event of delays in customs clearance that are not the fault of the Contractor, the Contractor shall be entitled to an extension in the Time for Completion, pursuant to GC Clause 7.2.

4.6 Installation

4.6.1 Setting Out/Supervision

Bench Mark: The Contractor shall be responsible for the true and proper setting-out of the Facilities in relation to bench marks, reference marks and lines provided to it in writing by or on behalf of the Employer.

If, at any time during the progress of installation of the Facilities, any error shall appear in the position, level or alignment of the Facilities, the Contractor shall forthwith notify the Project Manager of such error and, at its own expense, immediately rectify such error to the reasonable satisfaction of the Project Manager. If such error is based on incorrect data provided in writing by or on behalf of the Employer, the expense of rectifying the same shall be borne by the Employer.
4.6.2 Contractor’s Supervision: The Contractor shall give or provide all necessary superintendence during the installation of the Facilities, and the Construction Manager or its deputy shall be constantly on the Site to provide full-time superintendence of the installation. The Contractor shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand.

4.6.3 Labour:

Engagement of Staff and Labor

Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labor, local or otherwise, and for their payment, housing, feeding and transport.

The Contractor shall provide and employ on the Site in the installation of the Facilities such skilled, semi-skilled and unskilled labor as is necessary for the proper and timely execution of the Contract. The Contractor is encouraged to use local labor that has the necessary skills.

The Contractor shall be responsible for obtaining all necessary permit(s) and/or visa(s) from the appropriate authorities for the entry of all labor and personnel to be employed on the Site into the country where the Site is located. The Employer will, if requested by the Contractor, use his best endeavors in a timely and expeditious manner to assist the Contractor in obtaining any local, state, and national or government permission required for bringing in the Contractor’s personnel.

The Contractor shall at its own expense provide the means of repatriation to all of its and its Subcontractor’s personnel employed on the Contract at the Site to the place where they were recruited or to their domicile. It shall also provide suitable temporary maintenance of all such persons from the cessation of their employment on the Contract to the date programmed for their departure. In the event that the Contractor defaults in providing such means of transportation and temporary maintenance, the Employer may provide the same to such personnel and recover the cost of doing so from the Contractor.

4.6.4 Persons in the Service of Employer

The Contractor shall not recruit, or attempt to recruit, staff and labor from amongst the Employer’s Personnel.
4.6.5 Labor Laws

The Contractor shall comply with all the relevant labor Laws applicable to the Contractor’s Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.

The Contractor shall at all times during the progress of the Contract use its best endeavors to prevent any unlawful, riotous or disorderly conduct or behavior by or amongst its employees and the labor of its Subcontractors.

The Contractor shall, in all dealings with its labor and the labor of its Subcontractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official holidays, religious or other customs and all local laws and regulations pertaining to the employment of labor.

4.6.6 Rates of Wages and Conditions of Labor

The Contractor shall pay rates of wages, and observe conditions of labor, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.

The Contractor shall inform the Contractor’s Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages and allowances as are chargeable under the Laws for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such Laws.
4.6.7 Working Hours

No work shall be carried out on the Site on locally recognized days of rest, or outside the normal working hours stated in the PC, unless:

(a) otherwise stated in the Contract,

(b) the Project Manager gives consent, or

(c) the work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Project Manager.

If and when the Contractor considers it necessary to carry out work at night or on public holidays so as to meet the Time for Completion and requests the Project Manager’s consent thereto, the Project Manager shall not unreasonably withhold such consent.

This GC Clause shall not apply to any work which is customarily carried out by rotary or double-shifts.

4.6.8 Facilities for Staff and Labour

Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor’s Personnel. The Contractor shall also provide facilities for the Employer’s Personnel as stated in the Specification.

The Contractor shall not permit any of the Contractor’s Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.
4.6.9 Health and Safety

The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor’s Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor’s and Employer’s Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the performance of the Contract, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Contractor shall send to the Project Manager, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Engineer may reasonably require.

The Contractor shall throughout the contract (including the Defects Notification Period): (i) conduct Information, Education and Consultation Communication (IEC) campaigns, at least every other month, addressed to all the Site staff and labour (including all the Contractor’s employees, all Sub-Contractors and Employer’s and Project Manager’s employees, and all truck drivers and crew making deliveries to Site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behaviour with respect to of Sexually Transmitted Diseases (STD)—or Sexually Transmitted Infections (STI) in general and HIV/AIDS in particular; (ii) provide male or female condoms for all Site staff and labour as appropriate; and (iii) provide for STI and HIV/AIDS screening, diagnosis, counselling and referral to a dedicated national STI and HIV/AIDS program, (unless otherwise agreed) of all Site staff and labour.

The Contractor shall include in the program to be submitted for the execution of the Facilities under GC Clause 4.2.2 an alleviation program for Site staff and labour and their families in respect of Sexually Transmitted Infections (STI) and Sexually Transmitted Diseases (STD) including HIV/AIDS. The STI, STD and HIV/AIDS alleviation program shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of this Clause and the related specification. For each component, the program shall detail the resources to be provided or utilized and any related sub-contracting proposed. The program shall also include provision of a detailed cost estimate with supporting documentation. Payment to the Contractor for preparation and
implementation this program shall not exceed the Provisional Sum dedicated for this purpose.

4.6.10 Funeral Arrangements

In the event of the death of any of the Contractor’s personnel or accompanying members of their families, the Contractor shall be responsible for making the appropriate arrangements for their return or burial, unless otherwise specified in the PC.

4.6.11 Records of Contractor’s Personnel

The Contractor shall keep accurate records of the Contractor’s personnel, including the number of each class of Contractor’s Personnel on the Site and the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis in a form approved by the Project Manager and shall be available for inspection by the Project Manager until the Contractor has completed all work.

4.6.12 Supply of Foodstuffs

The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Contractor’s Personnel for the purposes of or in connection with the Contract.

4.6.13 Supply of Water

The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor’s Personnel.

4.6.14 Measures against Insect and Pest Nuisance

The Contractor shall at all times take the necessary precautions to protect the Contractor’s Personnel employed on the Site from insect and pest nuisance, and to reduce their danger to health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.

4.6.15 Alcoholic Liquor or Drugs

The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, give barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift barter or disposal by Contractor’s Personnel.
4.6.16 **Arms and Ammunition**

The Contractor shall not give, barter, or otherwise dispose of, to any person, any arms or ammunition of any kind, or allow Contractor's Personnel to do so.

4.6.17 **Prohibition of All Forms of Forced or Compulsory Labour**

The contractor shall not employ "forced or compulsory labour" in any form. "Forced or compulsory labour" consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.

4.6.18 **Prohibition of Harmful Child Labour**

The Contractor shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.

4.6.19 **Contractor’s Equipment**

All Contractor’s Equipment brought by the Contractor onto the Site shall be deemed to be intended to be used exclusively for the execution of the Contract. The Contractor shall not remove the same from the Site without the Project Manager’s consent that such Contractor’s Equipment is no longer required for the execution of the Contract.

Unless otherwise specified in the Contract, upon completion of the Facilities, the Contractor shall remove from the Site all Equipment brought by the Contractor onto the Site and any surplus materials remaining thereon.

The Employer will, if requested, use its best endeavours to assist the Contractor in obtaining any local, state or national government permission required by the Contractor for the export of the Contractor’s Equipment imported by the Contractor for use in the execution of the Contract that is no longer required for the execution of the Contract.

4.6.20 **Site Regulations and Safety**

The Employer and the Contractor shall establish Site regulations setting out the rules to be observed in the execution of the Contract at the Site and shall comply therewith. The Contractor shall prepare and submit to the Employer, with a copy to the Project Manager, proposed Site regulations for the Employer’s approval, which approval shall not be unreasonably withheld.

Such Site regulations shall include, but shall not be limited to, rules in respect of security, safety of the Facilities, gate control, sanitation, medical care, and fire prevention.
4.6.21 **Opportunities for Other Contractors**

The Contractor shall, upon written request from the Employer or the Project Manager, give all reasonable opportunities for carrying out the work to any other contractors employed by the Employer on or near the Site.

If the Contractor, upon written request from the Employer or the Project Manager, makes available to other contractors any roads or ways the maintenance for which the Contractor is responsible, permits the use by such other contractors of the Contractor’s Equipment, or provides any other service of whatsoever nature for such other contractors, the Employer shall fully compensate the Contractor for any loss or damage caused or occasioned by such other contractors in respect of any such use or service, and shall pay to the Contractor reasonable remuneration for the use of such equipment or the provision of such services.

The Contractor shall also so arrange to perform its work as to minimize, to the extent possible, interference with the work of other contractors. The Project Manager shall determine the resolution of any difference or conflict that may arise between the Contractor and other contractors and the workers of the Employer in regard to their work.

The Contractor shall notify the Project Manager promptly of any defects in the other contractors’ work that come to its notice, and that could affect the Contractor’s work. The Project Manager shall determine the corrective measures, if any, required to rectify the situation after inspection of the Facilities. Decisions made by the Project Manager shall be binding on the Contractor.

4.6.22 **Emergency Work**

If, by reason of an emergency arising in connection with and during the execution of the Contract, any protective or remedial work is necessary as a matter of urgency to prevent damage to the Facilities, the Contractor shall immediately carry out such work.

If the Contractor is unable or unwilling to do such work immediately, the Employer may do or cause such work to be done as the Employer may determine is necessary in order to prevent damage to the Facilities. In such event the Employer shall, as soon as practicable after the occurrence of any such emergency, notify the Contractor in writing of such emergency, the work done and the reasons therefore. If the work done or caused to be done by the Employer is work that the Contractor was liable to do at its own expense under the Contract, the reasonable costs incurred by the Employer in connection therewith shall be paid by the Contractor to the Employer. Otherwise, the cost of such remedial work shall be borne by the Employer.
4.6.23 Site Clearance

Site Clearance in Course of Performance: In the course of carrying out the Contract, the Contractor shall keep the Site reasonably free from all unnecessary obstruction, store or remove any surplus materials, clear away any wreckage, rubbish, temporary works from the Site, and remove any Contractor’s Equipment no longer required for execution of the Contract.

Clearance of Site after Completion: After Completion of all parts of the Facilities, the Contractor shall clear away and remove all wreckage, rubbish and debris of any kind from the Site, and shall leave the Site and Facilities in a clean and safe condition.

4.6.24 Watching and Lighting

The Contractor shall provide and maintain at its own expense all lighting, fencing, and watching when and where necessary for the proper execution and the protection of the Facilities, or for the safety of the owners and occupiers of adjacent property and for the safety of the public.

4.7 Test and Inspection

4.7.1 The Contractor shall at its own expense carry out at the place of manufacture and/or on the Site all such tests and/or inspections of the Plant and any part of the Facilities as are specified in the Contract.

4.7.2 The Employer and the Project Manager or their designated representatives shall be entitled to attend the aforesaid test and/or inspection, provided that the Employer shall bear all costs and expenses incurred in connection with such attendance including, but not limited to, all travelling and board and lodging expenses.

4.7.3 Whenever the Contractor is ready to carry out any such test and/or inspection, the Contractor shall give a reasonable advance notice of such test and/or inspection and of the place and time thereof to the Project Manager. The Contractor shall obtain from any relevant third Party or manufacturer any necessary permission or consent to enable the Employer and the Project Manager or their designated representatives to attend the test and/or inspection.

4.7.4 The Contractor shall provide the Project Manager with a certified report of the results of any such test and/or inspection.

If the Employer or Project Manager or their designated representatives fails to attend the test and/or inspection, or if it is agreed between the Parties that such persons shall not do so, then the Contractor may proceed with the test and/or inspection in the absence of such persons, and may provide the Project Manager with a certified report of the results thereof.
4.7.5 The Project Manager may require the Contractor to carry out any test and/or inspection not required by the Contract, provided that the Contractor’s reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of work on the Facilities and/or the Contractor’s performance of its other obligations under the Contract, due allowance will be made in respect of the Time for Completion and the other obligations so affected.

4.7.6 If any Plant or any part of the Facilities fails to pass any test and/or inspection, the Contractor shall either rectify or replace such Plant or part of the Facilities and shall repeat the test and/or inspection upon giving a notice under GC Clause 4.7.3.

4.7.8 If any dispute or difference of opinion shall arise between the Parties in connection with or arising out of the test and/or inspection of the Plant or part of the Facilities that cannot be settled between the Parties within a reasonable period of time, it may be referred to a Dispute Board for determination in accordance with GC Clause 8.2.

4.7.9 The Contractor shall afford the Employer and the Project Manager, at the Employer’s expense, access at any reasonable time to any place where the Plant are being manufactured or the Facilities are being installed, in order to inspect the progress and the manner of manufacture or installation, provided that the Project Manager shall give the Contractor a reasonable prior notice.

4.7.10 The Contractor agrees that neither the execution of a test and/or inspection of Plant or any part of the Facilities, nor the attendance by the Employer or the Project Manager, nor the issue of any test certificate pursuant to GC Clause 4.7.4, shall release the Contractor from any other responsibilities under the Contract.

4.7.11 No part of the Facilities or foundations shall be covered up on the Site without the Contractor carrying out any test and/or inspection required under the Contract. The Contractor shall give a reasonable notice to the Project Manager whenever any such parts of the Facilities or foundations are ready or about to be ready for test and/or inspection; such test and/or inspection and notice thereof shall be subject to the requirements of the Contract.

4.7.12 The Contractor shall uncover any part of the Facilities or foundations, or shall make openings in or through the same as the Project Manager may from time to time require at the Site, and shall reinstate and make good such part or parts.

If any parts of the Facilities or foundations have been covered up at the Site after compliance with the requirement of GC Clause 4.7.10 and are found to be executed in accordance with the Contract, the expenses of uncovering, making openings in or through, reinstating, and making good the same shall be borne by the Employer, and the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been delayed or impeded in the performance of any of its obligations under the Contract.

4.8 Completion of the Facilities
4.8.1 As soon as the Facilities or any part thereof has, in the opinion of the Contractor, been completed operationally and structurally and put in a tight and clean condition as specified in the Employer’s Requirements, excluding minor items not materially affecting the operation or safety of the Facilities, the Contractor shall so notify the Employer in writing.

4.8.2 Within seven (7) days after receipt of the notice from the Contractor under GC Clause 4.8.1, the Employer shall supply the operating and maintenance personnel specified in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer for Precommissioning of the Facilities or any part thereof.

Pursuant to the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, the Employer shall also provide, within the said seven (7) day period, the raw materials, utilities, lubricants, chemicals, catalysts, facilities, services and other matters required for Precommissioning of the Facilities or any part thereof.

4.8.3 As soon as reasonably practicable after the operating and maintenance personnel have been supplied by the Employer and the raw materials, utilities, lubricants, chemicals, catalysts, facilities, services and other matters have been provided by the Employer in accordance with GC Clause 4.8.2, the Contractor shall commence Precommissioning of the Facilities or the relevant part thereof in preparation for Commissioning, subject to GC Clause 4.9.12.

4.8.4 As soon as all works in respect of Precommissioning are completed and, in the opinion of the Contractor, the Facilities or any part thereof is ready for Commissioning, the Contractor shall so notify the Project Manager in writing.

4.8.5 The Project Manager shall, within fourteen (14) days after receipt of the Contractor’s notice under GC Clause 4.8.4, either issue a Completion Certificate in the form specified in the Employer’s Requirements (Forms and Procedures), stating that the Facilities or that part thereof have reached Completion as of the date of the Contractor’s notice under GC Clause 4.8.4, or notify the Contractor in writing of any defects and/or deficiencies.

If the Project Manager notifies the Contractor of any defects and/or deficiencies, the Contractor shall then correct such defects and/or deficiencies, and shall repeat the procedure described in GC Clause 4.8.4.

If the Project Manager is satisfied that the Facilities or that part thereof have reached Completion, the Project Manager shall, within seven (7) days after receipt of the Contractor’s repeated notice, issue a Completion Certificate stating that the Facilities or that part thereof have reached Completion as of the date of the Contractor’s repeated notice.

If the Project Manager is not so satisfied, then it shall notify the Contractor in writing of any defects and/or deficiencies within seven (7) days after receipt of the Contractor’s repeated notice, and the above procedure shall be repeated.
4.8.6 If the Project Manager fails to issue the Completion Certificate and fails to inform the Contractor of any defects and/or deficiencies within fourteen (14) days after receipt of the Contractor’s notice under GC Clause 4.8.4 or within seven (7) days after receipt of the Contractor’s repeated notice under GC Clause 4.8.5, or if the Employer makes use of the Facilities or part thereof, then the Facilities or that part thereof shall be deemed to have reached Completion as of the date of the Contractor’s notice or repeated notice, or as of the Employer’s use of the Facilities, as the case may be.

4.8.7 As soon as possible after Completion, the Contractor shall complete all outstanding minor items so that the Facilities are fully in accordance with the requirements of the Contract, failing which the Employer will undertake such completion and deduct the costs thereof from any monies owing to the Contractor.

4.8.8 Upon Completion, the Employer shall be responsible for the care and custody of the Facilities or the relevant part thereof, together with the risk of loss or damage thereto, and shall thereafter take over the Facilities or the relevant part thereof.

4.9 Commissioning and Operational Acceptance

4.9.1 Commissioning

Commissioning of the Facilities or any part thereof shall be commenced by the Contractor immediately after issue of the Completion Certificate by the Project Manager, pursuant to GC Clause 4.8.5, or immediately after the date of the deemed Completion, under GC Clause 4.8.6.

4.9.2 The Employer shall supply the operating and maintenance personnel and all raw materials, utilities, lubricants, chemicals, catalysts, facilities, services and other matters required for Commissioning.

4.9.3 In accordance with the requirements of the Contract, the Contractor’s and Project Manager’s advisory personnel shall attend the Commissioning, including the Guarantee Test, and shall advise and assist the Employer.

4.9.4 Guarantee Test

Subject to GC Clause 4.9.5, the Guarantee Test and repeats thereof shall be conducted by the Contractor during Commissioning of the Facilities or the relevant part thereof to ascertain whether the Facilities or the relevant part can attain the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees. The Employer shall promptly provide the Contractor with such information as the Contractor may reasonably require in relation to the conduct and results of the Guarantee Test and any repeats thereof.
4.9.5 If for reasons not attributable to the Contractor, the Guarantee Test of the Facilities or the relevant part thereof cannot be successfully completed within the period from the date of Completion specified in the PC or any other period agreed upon by the Employer and the Contractor, the Contractor shall be deemed to have fulfilled its obligations with respect to the Functional Guarantees, and GC Clauses 5.3.2 and 5.3.3 shall not apply.

4.9.6 **Operational Acceptance**

Subject to GC Clause 4.9.5 above, Operational Acceptance shall occur in respect of the Facilities or any part thereof when

(a) the Guarantee Test has been successfully completed and the Functional Guarantees are met; or

(b) the Guarantee Test has not been successfully completed or has not been carried out for reasons not attributable to the Contractor within the period from the date of Completion specified in the PC pursuant to GC Clause 4.9.2 above or any other period agreed upon by the Employer and the Contractor; or

(c) the Contractor has paid the liquidated damages specified in GC Clause 5.3.3 hereof; and

(d) any minor items mentioned in GC Clause 4.8.7 hereof relevant to the Facilities or that part thereof have been completed.

4.9.7 At any time after any of the events set out in GC Clause 4.9.6 have occurred, the Contractor may give a notice to the Project Manager requesting the issue of an Operational Acceptance Certificate in the form provided in the Employer’s Requirements (Forms and Procedures) in respect of the Facilities or the part thereof specified in such notice as of the date of such notice.

4.9.8 The Project Manager shall, after consultation with the Employer, and within seven (7) days after receipt of the Contractor’s notice, issue an Operational Acceptance Certificate.

4.9.9 If within seven (7) days after receipt of the Contractor’s notice, the Project Manager fails to issue the Operational Acceptance Certificate or fails to inform the Contractor in writing of the justifiable reasons why the Project Manager has not issued the Operational Acceptance Certificate, the Facilities or the relevant part thereof shall be deemed to have been accepted as of the date of the Contractor’s said notice.
4.9.10  **Partial Acceptance**

If the Contract specifies that Completion and Commissioning shall be carried out in respect of parts of the Facilities, the provisions relating to Completion and Commissioning including the Guarantee Test shall apply to each such part of the Facilities individually, and the Operational Acceptance Certificate shall be issued accordingly for each such part of the Facilities.

4.9.11  If a part of the Facilities comprises facilities such as buildings, for which no Commissioning or Guarantee Test is required, then the Project Manager shall issue the Operational Acceptance Certificate for such facility when it attains Completion, provided that the Contractor shall thereafter complete any outstanding minor items that are listed in the Operational Acceptance Certificate.

4.9.12  **Delayed Precommissioning and/or Guarantee Test**

In the event that the Contractor is unable to proceed with the Precommissioning of the Facilities pursuant to Clause 4.8.3, or with the Guarantee Test pursuant to Clause 4.9.4, for reasons attributable to the Employer either on account of non availability of other facilities under the responsibilities of other contractor(s), or for reasons beyond the Contractor’s control, the provisions leading to “deemed” completion of activities such as Completion, pursuant to GC Clause 4.8.6, and Operational Acceptance, pursuant to GC Clause 4.9.9, and Contractor’s obligations regarding Defect Liability Period, pursuant to GC Clause 5.2.2, Functional Guarantee, pursuant to GC Clause 5.3, and Care of Facilities, pursuant to GC Clause 6.2, and GC Clause 7.3.1, Suspension, shall not apply. In this case, the following provisions shall apply.
4.9.13 When the Contractor is notified by the Project Manager that he will be unable to proceed with the activities and obligations pursuant to above GC Clause 7.3, the Contractor shall be entitled to the following:

(a) the Time of Completion shall be extended for the period of suspension without imposition of liquidated damages pursuant to GC Clause 5.1.2;

(b) payments due to the Contractor in accordance with the provision specified in the Appendix to the Contract Agreement titled Terms and Procedures of Payment, which would not have been payable in normal circumstances due to non-completion of the subject activities, shall be released to the Contractor against submission of a security in the form of a bank guarantee of equivalent amount acceptable to the Employer, and which shall become null and void when the Contractor will have complied with its obligations regarding those payments, subject to the provision of Clause 4.9.14 below;

(c) the expenses towards the above security and extension of other securities under the contract, of which validity needs to be extended, shall be reimbursed to the Contractor by the Employer;

(d) the additional charges towards the care of the Facilities pursuant to GC Clause 6.2.1 shall be reimbursed to the Contractor by the Employer for the period between the notification mentioned above and the notification mentioned in GC Clause 4.9.15 below. The provision of GC Clause 5.4.2 shall apply to the Facilities during the same period.

4.9.14 In the event that the period of suspension under above GC Clause 4.9.12 actually exceeds one hundred eighty (180) days, the Employer and Contractor shall mutually agree to any additional compensation payable to the Contractor.

4.9.15 When the Contractor is notified by the Project Manager that the plant is ready for Precommissioning, the Contractor shall proceed without delay in performing Precommissioning in accordance with GC Clause 4.8.3.

5 Guarantees and Liabilities

5.1 Completion Time Guarantee

5.1.1 The Contractor guarantees that it shall attain Completion of the Facilities (or a part for which a separate time for completion is specified) within the Time for Completion specified in the PC pursuant to GC Clause 2.2.2, or within such extended time to which the Contractor shall be entitled under GC Clause 7.2 hereof.
5.1.2 If the Contractor fails to attain Completion of the Facilities or any part thereof within the Time for Completion or any extension thereof under GC Clause 7.2, the Contractor shall pay to the Employer liquidated damages in the amount specified in the PC as a percentage rate of the Contract Price or the relevant part thereof. The aggregate amount of such liquidated damages shall in no event exceed the amount specified as “Maximum” in the PC as a percentage rate of the Contract Price. Once the “Maximum” is reached, the Employer may consider termination of the Contract, pursuant to GC Clause 7.4.5.

Such payment shall completely satisfy the Contractor’s obligation to attain Completion of the Facilities or the relevant part thereof within the Time for Completion or any extension thereof under GC Clause 7.2. The Contractor shall have no further liability whatsoever to the Employer in respect thereof.

However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the Facilities or from any other obligations and liabilities of the Contractor under the Contract.

Save for liquidated damages payable under this GC Clause 5.1.2, the failure by the Contractor to attain any milestone or other act, matter or thing by any date specified in the Appendix to the Contract Agreement titled Time Schedule, and/or other program of work prepared pursuant to GC Clause 4.2.2 shall not render the Contractor liable for any loss or damage thereby suffered by the Employer.

5.1.3 If the Contractor attains Completion of the Facilities or any part thereof before the Time for Completion or any extension thereof under GC Clause 7.2, the Employer shall pay to the Contractor a bonus in the amount specified in the PC. The aggregate amount of such bonus shall in no event exceed the amount specified as “Maximum” in the PC.

5.2 Defect Liability

5.2.1 The Contractor warrants that the Facilities or any part thereof shall be free from defects in the design, engineering, materials and workmanship of the Plant supplied and of the work executed.
5.2.2 The Defect Liability Period shall be five hundred and forty (540) days from the date of Completion of the Facilities (or any part thereof) or one year from the date of Operational Acceptance of the Facilities (or any part thereof), whichever first occurs, unless specified otherwise in the PC pursuant to GC Clause 5.2.10.

If during the Defect Liability Period any defect should be found in the design, engineering, materials and workmanship of the Plant supplied or of the work executed by the Contractor, the Contractor shall promptly, in consultation and agreement with the Employer regarding appropriate remedying of the defects, and at its cost, repair, replace or otherwise make good as the Contractor shall determine at its discretion, such defect as well as any damage to the Facilities caused by such defect. The Contractor shall not be responsible for the repair, replacement or making good of any defect or of any damage to the Facilities arising out of or resulting from any of the following causes:

(a) improper operation or maintenance of the Facilities by the Employer;
(b) operation of the Facilities outside specifications provided in the Contract;
(c) normal wear and tear.

5.2.3 The Contractor’s obligations under this GC Clause 5.2 shall not apply to:

(a) any materials that are supplied by the Employer under GC Clause 4.5.2, are normally consumed in operation, or have a normal life shorter than the Defect Liability Period stated herein;
(b) any designs, specifications or other data designed, supplied or specified by or on behalf of the Employer or any matters for which the Contractor has disclaimed responsibility herein; or
(c) any other materials supplied or any other work executed by or on behalf of the Employer, except for the work executed by the Employer under GC Clause 5.2.7.

5.2.4 The Employer shall give the Contractor a notice stating the nature of any such defect together with all available evidence thereof, promptly following the discovery thereof. The Employer shall afford all reasonable opportunity for the Contractor to inspect any such defect.

5.2.5 The Employer shall afford the Contractor all necessary access to the Facilities and the Site to enable the Contractor to perform its obligations under this GC Clause 5.2.

The Contractor may, with the consent of the Employer, remove from the Site any Plant or any part of the Facilities that are defective if the nature of the defect, and/or any damage to the Facilities caused by the defect, is such that repairs cannot be expeditiously carried out at the Site.
5.2.6 If the repair, replacement or making good is of such a character that it may affect the efficiency of the Facilities or any part thereof, the Employer may give to the Contractor a notice requiring that tests of the defective part of the Facilities shall be made by the Contractor immediately upon completion of such remedial work, whereupon the Contractor shall carry out such tests.

If such part fails the tests, the Contractor shall carry out further repair, replacement or making good, as the case may be, until that part of the Facilities passes such tests. The tests shall be agreed upon by the Employer and the Contractor.

5.2.7 If the Contractor fails to commence the work necessary to remedy such defect or any damage to the Facilities caused by such defect within a reasonable time (which shall in no event be considered to be less than fifteen (15) days), the Employer may, following notice to the Contractor, proceed to do such work, and the reasonable costs incurred by the Employer in connection therewith shall be paid to the Employer by the Contractor or may be deducted by the Employer from any monies due the Contractor or claimed under the Performance Security.

5.2.8 If the Facilities or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defect Liability Period of the Facilities or such part, as the case may be, shall be extended by a period equal to the period during which the Facilities or such part cannot be used by the Employer because of any of the aforesaid reasons.

5.2.9 Except as provided in GC Clauses 5.2 and 5.4, the Contractor shall be under no liability whatsoever and howsoever arising, and whether under the Contract or at law, in respect of defects in the Facilities or any part thereof, the Plant, design or engineering or work executed that appear after Completion of the Facilities or any part thereof, except where such defects are the result of the gross negligence, fraud, or criminal or willful action of the Contractor.

5.2.10 In addition, any such component of the Facilities, and during the period of time as may be specified in the PC, shall be subject to an extended defect liability period. Such obligation of the Contractor shall be in addition to the defect liability period specified under GC Clause 5.2.2.

5.3 **Functional Guarantees**

5.3.1 The Contractor guarantees that during the Guarantee Test, the Facilities and all parts thereof shall attain the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, subject to and upon the conditions therein specified.
5.3.2 If, for reasons attributable to the Contractor, the minimum level of the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, are not met either in whole or in part, the Contractor shall at its cost and expense make such changes, modifications and/or additions to the Plant or any part thereof as may be necessary to meet at least the minimum level of such Guarantees. The Contractor shall notify the Employer upon completion of the necessary changes, modifications and/or additions, and shall request the Employer to repeat the Guarantee Test until the minimum level of the Guarantees has been met. If the Contractor eventually fails to meet the minimum level of Functional Guarantees, the Employer may consider termination of the Contract, pursuant to GC Clause 7.4.2.

5.3.3 If, for reasons attributable to the Contractor, the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, are not attained either in whole or in part, but the minimum level of the Functional Guarantees specified in the said Appendix to the Contract Agreement is met, the Contractor shall, at the Contractor’s option, either

(a) make such changes, modifications and/or additions to the Facilities or any part thereof that are necessary to attain the Functional Guarantees at its cost and expense, and shall request the Employer to repeat the Guarantee Test or

(b) pay liquidated damages to the Employer in respect of the failure to meet the Functional Guarantees in accordance with the provisions in the Appendix to the Contract Agreement titled Functional Guarantees.

5.3.4 The payment of liquidated damages under GC Clause 5.3.3, up to the limitation of liability specified in the Appendix to the Contract Agreement titled Functional Guarantees, shall completely satisfy the Contractor’s guarantees under GC Clause 5.3.1, and the Contractor shall have no further liability whatsoever to the Employer in respect thereof. Upon the payment of such liquidated damages by the Contractor, the Project Manager shall issue the Operational Acceptance Certificate for the Facilities or any part thereof in respect of which the liquidated damages have been so paid.

5.4 Patent Indemnity
Section VII. General Conditions

5.4.1 The Contractor shall, subject to the Employer’s compliance with GC Clause 5.4.2, indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney’s fees and expenses, which the Employer may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Contract by reason of: (a) the installation of the Facilities by the Contractor or the use of the Facilities in the country where the Site is located; and (b) the sale of the products produced by the Facilities in any country.

Such indemnity shall not cover any use of the Facilities or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, any infringement resulting from the use of the Facilities or any part thereof, or any products produced thereby in association or combination with any other equipment, plant or materials not supplied by the Contractor, pursuant to the Contract Agreement.

5.4.2 If any proceedings are brought or any claim is made against the Employer arising out of the matters referred to in GC Clause 5.4.1, the Employer shall promptly give the Contractor a notice thereof, and the Contractor may at its own expense and in the Employer’s name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Contractor fails to notify the Employer within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf. Unless the Contractor has so failed to notify the Employer within the twenty-eight (28) day period, the Employer shall make no admission that may be prejudicial to the defense of any such proceedings or claim.

The Employer shall, at the Contractor’s request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing.

5.4.3 The Employer shall indemnify and hold harmless the Contractor and its employees, officers and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney’s fees and expenses, which the Contractor may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Employer.

5.5 Limitation of Liability
5.5.1 Except in cases of criminal negligence or willful misconduct,

(a) neither Party shall be liable to the other Party, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, which may be suffered by the other Party in connection with the Contract, other than specifically provided as any obligation of the Party in the Contract, and

(b) the aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed the amount resulting from the application of the multiplier specified in the PC, to the Contract Price or, if a multiplier is not so specified, the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Contractor to indemnify the Employer with respect to patent infringement.

6 Risk Distribution

6.1 Transfer of Ownership

6.1.1 Ownership of the Plant (including spare parts) to be imported into the country where the Site is located shall be transferred to the Employer upon loading on to the mode of transport to be used to convey the Plant from the country of origin to that country.

6.1.2 Ownership of the Plant (including spare parts) procured in the country where the Site is located shall be transferred to the Employer when the Plant are brought on to the Site.

6.1.3 Ownership of the Contractor’s Equipment used by the Contractor and its Subcontractors in connection with the Contract shall remain with the Contractor or its Subcontractors.

6.1.4 Ownership of any Plant in excess of the requirements for the Facilities shall revert to the Contractor upon Completion of the Facilities or at such earlier time when the Employer and the Contractor agree that the Plant in question are no longer required for the Facilities.

6.1.5 Notwithstanding the transfer of ownership of the Plant, the responsibility for care and custody thereof together with the risk of loss or damage thereto shall remain with the Contractor pursuant to GC Clause 6.2 (Care of Facilities) hereof until Completion of the Facilities or the part thereof in which such Plant are incorporated.

6.2 Care of Facilities
6.2.1 The Contractor shall be responsible for the care and custody of the Facilities or any part thereof until the date of Completion of the Facilities pursuant to GC Clause 4.8 or, where the Contract provides for Completion of the Facilities in parts, until the date of Completion of the relevant part, and shall make good at its own cost any loss or damage that may occur to the Facilities or the relevant part thereof from any cause whatsoever during such period. The Contractor shall also be responsible for any loss or damage to the Facilities caused by the Contractor or its Subcontractors in the course of any work carried out, pursuant to GC Clause 5.2. Notwithstanding the foregoing, the Contractor shall not be liable for any loss or damage to the Facilities or that part thereof caused by reason of any of the matters specified or referred to in paragraphs (a), (b) and (c) of GC Clauses 6.2.2 and 6.8.1.

6.2.2 If any loss or damage occurs to the Facilities or any part thereof or to the Contractor’s temporary facilities by reason of

(a) insofar as they relate to the country where the Site is located, nuclear reaction, nuclear radiation, radioactive contamination, pressure wave caused by aircraft or other aerial objects, or any other occurrences that an experienced contractor could not reasonably foresee, or if reasonably foreseeable could not reasonably make provision for or insure against, insofar as such risks are not normally insurable on the insurance market and are mentioned in the general exclusions of the policy of insurance, including War Risks and Political Risks, taken out under GC Clause 6.4 hereof; or

(b) any use or occupation by the Employer or any third Party other than a Subcontractor, authorized by the Employer of any part of the Facilities; or

(c) any use of or reliance upon any design, data or specification provided or designated by or on behalf of the Employer, or any such matter for which the Contractor has disclaimed responsibility herein,

the Employer shall pay to the Contractor all sums payable in respect of the Facilities executed, notwithstanding that the same be lost, destroyed or damaged, and will pay to the Contractor the replacement value of all temporary facilities and all parts thereof lost, destroyed or damaged. If the Employer requests the Contractor in writing to make good any loss or damage to the Facilities thereby occasioned, the Contractor shall make good the same at the cost of the Employer in accordance with GC Clause 7.1. If the Employer does not request the Contractor in writing to make good any loss or damage to the Facilities thereby occasioned, the Employer shall either request a change in accordance with GC Clause 7.1, excluding the performance of that part of the Facilities thereby lost, destroyed or damaged, or, where the loss or damage affects a substantial part of the Facilities, the Employer shall terminate the Contract pursuant to GC Clause 7.4.1 hereof.
6.2.3 The Contractor shall be liable for any loss of or damage to any Contractor’s Equipment, or any other property of the Contractor used or intended to be used for purposes of the Facilities, except (i) as mentioned in GC Clause 6.2.2 with respect to the Contractor’s temporary facilities, and (ii) where such loss or damage arises by reason of any of the matters specified in GC Clauses 6.2.2 (b) and (c) and 6.8.1.

6.2.4 With respect to any loss or damage caused to the Facilities or any part thereof or to the Contractor’s Equipment by reason of any of the matters specified in GC Clause 6.8.1, the provisions of GC Clause 6.8.3 shall apply.

6.3 Loss of or Damage to Property; Accident or Injury to Workers; Indemnification

6.3.1 Subject to GC Clause 6.3.3, the Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney’s fees and expenses, in respect of the death or injury of any person or loss of or damage to any property other than the Facilities whether accepted or not, arising in connection with the supply and installation of the Facilities and by reason of the negligence of the Contractor or its Subcontractors, or their employees, officers or agents, except any injury, death or property damage caused by the negligence of the Employer, its contractors, employees, officers or agents.

6.3.2 If any proceedings are brought or any claim is made against the Employer that might subject the Contractor to liability under GC Clause 6.3.1, the Employer shall promptly give the Contractor a notice thereof and the Contractor may at its own expense and in the Employer’s name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Contractor fails to notify the Employer within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf. Unless the Contractor has so failed to notify the Employer within the twenty-eight (28) day period, the Employer shall make no admission that may be prejudicial to the defense of any such proceedings or claim.

The Employer shall, at the Contractor’s request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing.

6.3.3 The Employer shall indemnify and hold harmless the Contractor and its employees, officers and Subcontractors from any liability for loss of or damage to property of the Employer, other than the Facilities not yet taken over, that is caused by fire, explosion or any other perils, in excess of the amount recoverable from insurances procured under GC Clause 6.4, provided that such fire, explosion or other perils were not caused by any act or failure of the Contractor.
6.3.4 The Party entitled to the benefit of an indemnity under this GC Clause 6.3 shall take all reasonable measures to mitigate any loss or damage which has occurred. If the Party fails to take such measures, the other Party’s liabilities shall be correspondingly reduced.

6.4 Insurance

6.4.1 To the extent specified in the Appendix to the Contract Agreement titled Insurance Requirements, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified in the said Appendix. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, who should not unreasonably withhold such approval.

(a) Cargo Insurance During Transport

Covering loss or damage occurring while in transit from the Contractor’s or Subcontractor’s works or stores until arrival at the Site, to the Plant (including spare parts thereof) and to the Contractor’s Equipment.

(b) Installation All Risks Insurance

Covering physical loss or damage to the Facilities at the Site, occurring prior to Completion of the Facilities, with an extended maintenance coverage for the Contractor’s liability in respect of any loss or damage occurring during the Defect Liability Period while the Contractor is on the Site for the purpose of performing its obligations during the Defect Liability Period.

(c) Third Party Liability Insurance

Covering bodily injury or death suffered by third Parties including the Employer’s personnel, and loss of or damage to property occurring in connection with the supply and installation of the Facilities.

(d) Automobile Liability Insurance

Covering use of all vehicles used by the Contractor or its Subcontractors, whether or not owned by them, in connection with the execution of the Contract.

(e) Workers’ Compensation

In accordance with the statutory requirements applicable in any country where the Contract or any part thereof is executed.

(f) Employer’s Liability
In accordance with the statutory requirements applicable in any country where the Contract or any part thereof is executed.

(g) **Other Insurances**

Such other insurances as may be specifically agreed upon by the Parties hereto as listed in the Appendix to the Contract Agreement titled Insurance Requirements.

6.4.2 The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GC Clause 6.4.1, except for the Third Party Liability, Workers’ Compensation and Employer’s Liability Insurances, and the Contractor’s Subcontractors shall be named as co-insureds under all insurance policies taken out by the Contractor pursuant to GC Clause 6.4.1 except for the Cargo Insurance During Transport, Workers’ Compensation and Employer’s Liability Insurances. All insurer’s rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies.

6.4.3 The Contractor shall, in accordance with the provisions of the Appendix to the Contract Agreement titled Insurance Requirements, deliver to the Employer certificates of insurance or copies of the insurance policies as evidence that the required policies are in full force and effect. The certificates shall provide that no less than twenty-one (21) days’ notice shall be given to the Employer by insurers prior to cancellation or material modification of a policy.

6.4.4 The Contractor shall ensure that, where applicable, its Subcontractor(s) shall take out and maintain in effect adequate insurance policies for their personnel and vehicles and for work executed by them under the Contract, unless such Subcontractors are covered by the policies taken out by the Contractor.

6.4.5 The Employer shall at its expense take out and maintain in effect during the performance of the Contract those insurances specified in the Appendix to the Contract Agreement titled Insurance Requirements, in the sums and with the deductibles and other conditions specified in the said Appendix. The Contractor and the Contractor’s Subcontractors shall be named as co-insureds under all such policies. All insurers’ rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies. The Employer shall deliver to the Contractor satisfactory evidence that the required insurances are in full force and effect. The policies shall provide that not less than twenty-one (21) days’ notice shall be given to the Contractor by all insurers prior to any cancellation or material modification of the policies. If so requested by the Contractor, the Employer shall provide copies of the policies taken out by the Employer under this GC Clause 6.4.5.
6.4.6 If the Contractor fails to take out and/or maintain in effect the insurances referred to in GC Clause 6.4.1, the Employer may take out and maintain in effect any such insurances and may from time to time deduct from any amount due the Contractor under the Contract any premium that the Employer shall have paid to the insurer, or may otherwise recover such amount as a debt due from the Contractor. If the Employer fails to take out and/or maintain in effect the insurances referred to in GC 6.4.5, the Contractor may take out and maintain in effect any such insurances and may from time to time deduct from any amount due the Employer under the Contract any premium that the Contractor shall have paid to the insurer, or may otherwise recover such amount as a debt due from the Employer. If the Contractor fails to or is unable to take out and maintain in effect any such insurances, the Contractor shall nevertheless have no liability or responsibility towards the Employer, and the Contractor shall have full recourse against the Employer for any and all liabilities of the Employer herein.

6.4.7 Unless otherwise provided in the Contract, the Contractor shall prepare and conduct all and any claims made under the policies effected by it pursuant to this GC Clause 6.4, and all monies payable by any insurers shall be paid to the Contractor. The Employer shall give to the Contractor all such reasonable assistance as may be required by the Contractor. With respect to insurance claims in which the Employer’s interest is involved, the Contractor shall not give any release or make any compromise with the insurer without the prior written consent of the Employer. With respect to insurance claims in which the Contractor’s interest is involved, the Employer shall not give any release or make any compromise with the insurer without the prior written consent of the Contractor.

6.5 Unforeseen Conditions
6.5.1 If, during the execution of the Contract, the Contractor shall encounter on the Site any physical conditions other than climatic conditions, or artificial obstructions that could not have been reasonably foreseen prior to the date of the Contract Agreement by an experienced contractor on the basis of reasonable examination of the data relating to the Facilities including any data as to boring tests, provided by the Employer, and on the basis of information that it could have obtained from a visual inspection of the Site if access thereto was available, or other data readily available to it relating to the Facilities, and if the Contractor determines that it will in consequence of such conditions or obstructions incur additional cost and expense or require additional time to perform its obligations under the Contract that would not have been required if such physical conditions or artificial obstructions had not been encountered, the Contractor shall promptly, and before performing additional work or using additional Plant or Contractor’s Equipment, notify the Project Manager in writing of

(a) the physical conditions or artificial obstructions on the Site that could not have been reasonably foreseen;

(b) the additional work and/or Plant and/or Contractor’s Equipment required, including the steps which the Contractor will or proposes to take to overcome such conditions or obstructions;

(c) the extent of the anticipated delay; and

(d) the additional cost and expense that the Contractor is likely to incur.

On receiving any notice from the Contractor under this GC Clause 6.5.1, the Project Manager shall promptly consult with the Employer and Contractor and decide upon the actions to be taken to overcome the physical conditions or artificial obstructions encountered. Following such consultations, the Project Manager shall instruct the Contractor, with a copy to the Employer, of the actions to be taken.

6.5.2 Any reasonable additional cost and expense incurred by the Contractor in following the instructions from the Project Manager to overcome such physical conditions or artificial obstructions referred to in GC Clause 6.5.1 shall be paid by the Employer to the Contractor as an addition to the Contract Price.

6.5.3 If the Contractor is delayed or impeded in the performance of the Contract because of any such physical conditions or artificial obstructions referred to in GC Clause 6.5.1, the Time for Completion shall be extended in accordance with GC Clause 7.2.

6.6 Change in Laws and Regulations
6.6.1 If, after the date twenty-eight (28) days prior to the date of Bid submission, in the country where the Site is located, any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed which shall be deemed to include any change in interpretation or application by the competent authorities, that subsequently affects the costs and expenses of the Contractor and/or the Time for Completion, the Contract Price shall be correspondingly increased or decreased, and/or the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced costs shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with the PC pursuant to GC Clause 3.1.2.

6.7 Force Majeure

6.7.1 “Force Majeure” shall mean any event beyond the reasonable control of the Employer or of the Contractor, as the case may be, and which is unavoidable notwithstanding the reasonable care of the Party affected, and shall include, without limitation, the following:

(a) war, hostilities or warlike operations whether a state of war be declared or not, invasion, act of foreign enemy and civil war
(b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion and terrorist acts
(c) confiscation, nationalization, mobilization, commandeering or requisition by or under the order of any government or de jure or de facto authority or ruler or any other act or failure to act of any local state or national government authority
(d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine and plague
(e) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear and pressure waves or other natural or physical disaster
(f) shortage of labour, materials or utilities where caused by circumstances that are themselves Force Majeure.
6.7.2 If either Party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within fourteen (14) days after the occurrence of such event.

6.7.3 The Party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such Party’s performance is prevented, hindered or delayed. The Time for Completion shall be extended in accordance with GC Clause 7.2.

6.7.4 The Party or Parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect thereof upon its or their performance of the Contract and to fulfil its or their obligations under the Contract, but without prejudice to either Party’s right to terminate the Contract under GC Clauses 6.7.6 and 6.8.5.

6.7.5 No delay or non-performance by either Party hereto caused by the occurrence of any event of Force Majeure shall

(a) constitute a default or breach of the Contract, or

(b) give rise to any claim for damages or additional cost or expense occasioned thereby, subject to GC Clauses 6.2.2, 6.8.3 and 6.8.4

if and to the extent that such delay or non-performance is caused by the occurrence of an event of Force Majeure.

6.7.6 If the performance of the Contract is substantially prevented, hindered or delayed for a single period of more than sixty (60) days or an aggregate period of more than one hundred and twenty (120) days on account of one or more events of Force Majeure during the currency of the Contract, the Parties will attempt to develop a mutually satisfactory solution, failing which either Party may terminate the Contract by giving a notice to the other, but without prejudice to either Party’s right to terminate the Contract under GC Clause 6.8.5.

6.7.7 In the event of termination pursuant to GC Clause 6.7.6, the rights and obligations of the Employer and the Contractor shall be as specified in GC Clauses 7.4.2 and 7.4.3.

6.7.8 Notwithstanding GC Clause 6.7.5, Force Majeure shall not apply to any obligation of the Employer to make payments to the Contractor herein.

6.8 War Risks

6.8.1 “War Risks” shall mean any event specified in paragraphs (a) and (b) of GC Clause 6.7.1 and any explosion or impact of any mine, bomb, shell, grenade or other projectile, missile, munitions or explosive of war, occurring or existing in or near the country (or countries) where the Site is located.
6.8.2 Notwithstanding anything contained in the Contract, the Contractor shall have no liability whatsoever for or with respect to

(a) destruction of or damage to Facilities, Plant, or any part thereof;

(b) destruction of or damage to property of the Employer or any third Party;

or

(c) injury or loss of life

if such destruction, damage, injury or loss of life is caused by any War Risks, and the Employer shall indemnify and hold the Contractor harmless from and against any and all claims, liabilities, actions, lawsuits, damages, costs, charges or expenses arising in consequence of or in connection with the same.

6.8.3 If the Facilities or any Plant or Contractor’s Equipment or any other property of the Contractor used or intended to be used for the purposes of the Facilities shall sustain destruction or damage by reason of any War Risks, the Employer shall pay the Contractor for

(a) any part of the Facilities or the Plant so destroyed or damaged to the extent not already paid for by the Employer

and so far as may be required by the Employer, and as may be necessary for completion of the Facilities

(b) replacing or making good any Contractor’s Equipment or other property of the Contractor so destroyed or damaged

(c) replacing or making good any such destruction or damage to the Facilities or the Plant or any part thereof.

If the Employer does not require the Contractor to replace or make good any such destruction or damage to the Facilities, the Employer shall either request a change in accordance with GC Clause 7.1, excluding the performance of that part of the Facilities thereby destroyed or damaged or, where the loss, destruction or damage affects a substantial part of the Facilities, shall terminate the Contract, pursuant to GC Clause 7.4.1.

If the Employer requires the Contractor to replace or make good on any such destruction or damage to the Facilities, the Time for Completion shall be extended in accordance with GC Clause 7.2.

6.8.4 Notwithstanding anything contained in the Contract, the Employer shall pay the Contractor for any increased costs or incidentals to the execution of the Contract that are in any way attributable to, consequent on, resulting from, or in any way connected with any War Risks, provided that the Contractor shall as soon as practicable notify the Employer in writing of any such increased cost.
6.8.5 If during the performance of the Contract any War Risks shall occur that financially or otherwise materially affect the execution of the Contract by the Contractor, the Contractor shall use its reasonable efforts to execute the Contract with due and proper consideration given to the safety of its and its Subcontractors’ personnel engaged in the work on the Facilities, provided, however, that if the execution of the work on the Facilities becomes impossible or is substantially prevented for a single period of more than sixty (60) days or an aggregate period of more than one hundred and twenty (120) days on account of any War Risks, the Parties will attempt to develop a mutually satisfactory solution, failing which either Party may terminate the Contract by giving a notice to the other.

6.8.6 In the event of termination pursuant to GC Clauses 6.8.3 or 6.8.5, the rights and obligations of the Employer and the Contractor shall be specified in GC Clauses 7.4.2 and 7.4.3.

7 Change in Contract Elements

7.1 Change in the Facilities

7.1.1 Introducing a Change

Subject to GC Clauses 7.1.9 and 7.1.11, the Employer shall have the right to propose, and subsequently require, that the Project Manager order the Contractor from time to time during the performance of the Contract to make any change, modification, addition or deletion to, in or from the Facilities hereinafter called “Change”, provided that such Change falls within the general scope of the Facilities and does not constitute unrelated work and that it is technically practicable, taking into account both the state of advancement of the Facilities and the technical compatibility of the Change envisaged with the nature of the Facilities as specified in the Contract.

7.1.2 The Contractor may from time to time during its performance of the Contract propose to the Employer with a copy to the Project Manager, any Change that the Contractor considers necessary or desirable to improve the quality, efficiency or safety of the Facilities. The Employer may at its discretion approve or reject any Change proposed by the Contractor, provided that the Employer shall approve any Change proposed by the Contractor to ensure the safety of the Facilities.

7.1.3 Notwithstanding GC Clauses 7.1.1 and 7.1.2, no change made necessary because of any default of the Contractor in the performance of its obligations under the Contract shall be deemed to be a Change, and such change shall not result in any adjustment of the Contract Price or the Time for Completion.

7.1.4 The procedure on how to proceed with and execute Changes is specified in GC Clauses 7.1.5 and 7.1.12, and further details and forms are provided in the Employer’s Requirements (Forms and Procedures).
7.1.5 **Changes Originating from Employer**

If the Employer proposes a Change pursuant to GC Clause 7.1.1, it shall send to the Contractor a “Request for Change Proposal,” requiring the Contractor to prepare and furnish to the Project Manager as soon as reasonably practicable a “Change Proposal,” which shall include the following:

(a) brief description of the Change  
(b) effect on the Time for Completion  
(c) estimated cost of the Change  
(d) effect on Functional Guarantees (if any)  
(e) effect on the Facilities  
(f) effect on any other provisions of the Contract.

7.1.6 Prior to preparing and submitting the “Change Proposal,” the Contractor shall submit to the Project Manager an “Estimate for Change Proposal,” which shall be an estimate of the cost of preparing and submitting the Change Proposal.

Upon receipt of the Contractor’s Estimate for Change Proposal, the Employer shall do one of the following:

(a) accept the Contractor’s estimate with instructions to the Contractor to proceed with the preparation of the Change Proposal  
(b) advise the Contractor of any part of its Estimate for Change Proposal that is unacceptable and request the Contractor to review its estimate  
(c) advise the Contractor that the Employer does not intend to proceed with the Change.

7.1.7 Upon receipt of the Employer’s instruction to proceed under GC Clause 7.1.6 (a), the Contractor shall, with proper expedition, proceed with the preparation of the Change Proposal, in accordance with GC Clause 7.1.5.

7.1.8 The pricing of any Change shall, as far as practicable, be calculated in accordance with the rates and prices included in the Contract. If such rates and prices are inequitable, the Parties thereto shall agree on specific rates for the valuation of the Change.
7.1.9 If before or during the preparation of the Change Proposal it becomes apparent that the aggregate effect of compliance therewith and with all other Change Orders that have already become binding upon the Contractor under this GC Clause 7.1 would be to increase or decrease the Contract Price as originally set forth in Article 2 (Contract Price) of the Contract Agreement by more than fifteen percent (15%), the Contractor may give a written notice of objection thereto prior to furnishing the Change Proposal as aforesaid. If the Employer accepts the Contractor’s objection, the Employer shall withdraw the proposed Change and shall notify the Contractor in writing thereof.

The Contractor’s failure to so object shall neither affect its right to object to any subsequent requested Changes or Change Orders herein, nor affect its right to take into account, when making such subsequent objection, the percentage increase or decrease in the Contract Price that any Change not objected to by the Contractor represents.

7.1.10 Upon receipt of the Change Proposal, the Employer and the Contractor shall mutually agree upon all matters therein contained. Within fourteen (14) days after such agreement, the Employer shall, if it intends to proceed with the Change, issue the Contractor with a Change Order. If the Employer is unable to reach a decision within fourteen (14) days, it shall notify the Contractor with details of when the Contractor can expect a decision.

If the Employer decides not to proceed with the Change for whatever reason, it shall, within the said period of fourteen (14) days, notify the Contractor accordingly. Under such circumstances, the Contractor shall be entitled to reimbursement of all costs reasonably incurred by it in the preparation of the Change Proposal, provided that these do not exceed the amount given by the Contractor in its Estimate for Change Proposal submitted in accordance with GC Clause 7.1.6.

7.1.11 If the Employer and the Contractor cannot reach agreement on the price for the Change, an equitable adjustment to the Time for Completion, or any other matters identified in the Change Proposal, the Employer may nevertheless instruct the Contractor to proceed with the Change by issue of a “Pending Agreement Change Order.”

Upon receipt of a Pending Agreement Change Order, the Contractor shall immediately proceed with effecting the Changes covered by such Order. The Parties shall thereafter attempt to reach agreement on the outstanding issues under the Change Proposal.

If the Parties cannot reach agreement within sixty (60) days from the date of issue of the Pending Agreement Change Order, then the matter may be referred to the Dispute Board in accordance with the provisions of GC Clause 8.2.1.
7.1.12 **Changes Originating from Contractor**

If the Contractor proposes a Change pursuant to GC Clause 7.1.2, the Contractor shall submit to the Project Manager a written “Application for Change Proposal,” giving reasons for the proposed Change and including the information specified in GC Clause 7.1.5.

Upon receipt of the Application for Change Proposal, the Parties shall follow the procedures outlined in GC Clauses 7.1.10 and 7.1.11. However, should the Employer choose not to proceed, the Contractor shall not be entitled to recover the costs of preparing the Application for Change Proposal.

7.2 **Extension of Time for Completion**

7.2.1 The Time(s) for Completion specified in the PC pursuant to GC Clause 2.2.2 shall be extended if the Contractor is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:

(a) any Change in the Facilities as provided in GC Clause 7.1; or

(b) any occurrence of Force Majeure as provided in GC Clause 6.7, unforeseen conditions as provided in GC Clause 6.5, or other occurrence of any of the matters specified or referred to in paragraphs (a), (b) and (c) of GC Clause 6.2.2; or

(c) any suspension order given by the Employer under GC Clause 7.3 hereof or reduction in the rate of progress pursuant to GC Clause 7.3.2; or

(d) any changes in laws and regulations as provided in GC Clause 6.6; or

(e) any default or breach of the Contract by the Employer, Appendix to the Contract Agreement titled , or any activity, act or omission of the Employer, or the Project Manager, or any other contractors employed by the Employer; or

(f) any delay on the part of a sub-contractor, provided such delay is due to a cause for which the Contractor himself would have been entitled to an extension of time under this Clause; or

(g) delays attributable to the Employer or caused by customs; or

(h) any other matter specifically mentioned in the Contract;

by such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Contractor.
7.2.2 Except where otherwise specifically provided in the Contract, the Contractor shall submit to the Project Manager a notice of a claim for an extension of the Time for Completion, together with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, the Employer and the Contractor shall agree upon the period of such extension. In the event that the Contractor does not accept the Employer’s estimate of a fair and reasonable time extension, the Contractor shall be entitled to refer the matter to a Dispute Board, pursuant to GC Clause 8.2.1.

7.2.3 The Contractor shall at all times use its reasonable efforts to minimize any delay in the performance of its obligations under the Contract.

7.2.4 In all cases where the Contractor has given a notice of a claim for an extension of time under GC 7.2.2, the Contractor shall consult with the Project Manager in order to determine the steps (if any) which can be taken to overcome or minimize the actual or anticipated delay. The Contractor shall there after comply with all reasonable instructions which the Project Manager shall give in order to minimize such delay. If compliance with such instructions shall cause the Contractor to incur extra costs and the Contractor is entitled to an extension of time under GC 7.2.1, the amount of such extra costs shall be added to the Contract Price.

7.3 Suspension

7.3.1 The Employer may request the Project Manager, by notice to the Contractor, to order the Contractor to suspend performance of any or all of its obligations under the Contract. Such notice shall specify the obligation of which performance is to be suspended, the effective date of the suspension and the reasons thereof. The Contractor shall thereupon suspend performance of such obligation, except those obligations necessary for the care or preservation of the Facilities, until ordered in writing to resume such performance by the Project Manager.

If, by virtue of a suspension order given by the Project Manager, other than by reason of the Contractor’s default or breach of the Contract, the Contractor’s performance of any of its obligations is suspended for an aggregate period of more than ninety (90) days, then at any time thereafter and provided that at that time such performance is still suspended, the Contractor may give a notice to the Project Manager requiring that the Employer shall, within twenty-eight (28) days of receipt of the notice, order the resumption of such performance or request and subsequently order a change in accordance with GC Clause 7.1, excluding the performance of the suspended obligations from the Contract.

If the Employer fails to do so within such period, the Contractor may, by a further notice to the Project Manager, elect to treat the suspension, where it affects a part only of the Facilities, as a deletion of such part in accordance with GC Clause 7.1 or, where it affects the whole of the Facilities, as termination of the Contract under GC Clause 7.4.1.
7.3.2 If

(a) the Employer has failed to pay the Contractor any sum due under the Contract within the specified period, has failed to approve any invoice or supporting documents without just cause pursuant to the Appendix to the Contract Agreement titled Terms and Procedures of Payment, or commits a substantial breach of the Contract, the Contractor may give a notice to the Employer that requires payment of such sum, with interest thereon as stipulated in GC Clause 3.2.3, requires approval of such invoice or supporting documents, or specifies the breach and requires the Employer to remedy the same, as the case may be. If the Employer fails to pay such sum together with such interest, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, or fails to remedy the breach or take steps to remedy the breach within fourteen (14) days after receipt of the Contractor’s notice; or

(b) the Contractor is unable to carry out any of its obligations under the Contract for any reason attributable to the Employer, including but not limited to the Employer’s failure to provide possession of or access to the Site or other areas in accordance with GC Clause 4.2.2, or failure to obtain any governmental permit necessary for the execution and/or completion of the Facilities;

then the Contractor may by fourteen (14) days’ notice to the Employer suspend performance of all or any of its obligations under the Contract, or reduce the rate of progress.

7.3.3 If the Contractor’s performance of its obligations is suspended or the rate of progress is reduced pursuant to this GC Clause 7.3, then the Time for Completion shall be extended in accordance with GC Clause 7.2.1, and any and all additional costs or expenses incurred by the Contractor as a result of such suspension or reduction shall be paid by the Employer to the Contractor in addition to the Contract Price, except in the case of suspension order or reduction in the rate of progress by reason of the Contractor’s default or breach of the Contract.

7.3.4 During the period of suspension, the Contractor shall not remove from the Site any Plant, any part of the Facilities or any Contractor’s Equipment, without the prior written consent of the Employer.

7.4 Termination

7.4.1 Termination for Employer’s Convenience

The Employer may at any time terminate the Contract for any reason by giving the Contractor a notice of termination that refers to this GC Clause 7.4.1.
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7.4.2 Upon receipt of the notice of termination under GC Clause 7.4.1, the Contractor shall either immediately or upon the date specified in the notice of termination

(a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition

(b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) (ii) below

(c) remove all Contractor’s Equipment from the Site, repatriate the Contractor’s and its Subcontractors’ personnel from the Site, remove from the Site any wreckage, rubbish and debris of any kind, and leave the whole of the Site in a clean and safe condition, and

(d) subject to the payment specified in GC Clause 7.4.3, 

(i) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination;

(ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors; and

(iii) deliver to the all non-proprietary drawings, specifications and other documents prepared by the Contractor or its Subcontractors as at the date of termination in connection with the Facilities.
7.4.3 In the event of termination of the Contract under GC Clause 7.4.1, the Employer shall pay to the Contractor the following amounts:

(a) the Contract Price, properly attributable to the parts of the Facilities executed by the Contractor as of the date of termination;

(b) the costs reasonably incurred by the Contractor in the removal of the Contractor’s Equipment from the Site and in the repatriation of the Contractor’s and its Subcontractors’ personnel;

(c) any amounts to be paid by the Contractor to its Subcontractors in connection with the termination of any subcontracts, including any cancellation charges;

(d) costs incurred by the Contractor in protecting the Facilities and leaving the Site in a clean and safe condition pursuant to paragraph (a) of GC Clause 7.4.2;

(e) the cost of satisfying all other obligations, commitments and claims that the Contractor may in good faith have undertaken with third Parties in connection with the Contract and that are not covered by paragraphs (a) through (d) above.

7.4.4 Termination for Contractor’s Default

The Employer, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith in the following circumstances by giving a notice of termination and its reasons thereof to the Contractor, referring to this GC Clause 7.4.4:

(a) if the Contractor becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Contractor is a corporation, a resolution is passed or order is made for its winding up, other than a voluntary liquidation for the purposes of amalgamation or reconstruction, a receiver is appointed over any part of its undertaking or assets, or if the Contractor takes or suffers any other analogous action in consequence of debt;

(b) if the Contractor assigns or transfers the Contract or any right or interest therein in violation of the provision of GC Clause 7.5.1; or

(c) if the Contractor, in the judgment of the Employer has engaged in corrupt, collusive, coercive, fraudulent or obstructive practices, as defined in GC Clause 1.14, in competing for or in executing the Contract.
7.4.5 If the Contractor

(a) has abandoned or repudiated the Contract;

(b) has without valid reason failed to commence work on the Facilities promptly or has suspended, other than pursuant to GC Clause 7.3.2, the progress of Contract performance for more than twenty-eight (28) days after receiving a written instruction from the Employer to proceed;

(c) persistently fails to execute the Contract in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just cause;

(d) refuses or is unable to provide sufficient materials, services or labor to execute and complete the Facilities in the manner specified in the program furnished under GC Clause 4.2.2 at rates of progress that give reasonable assurance to the Employer that the Contractor can attain Completion of the Facilities by the Time for Completion as extended;

then the Employer may, without prejudice to any other rights it may possess under the Contract, give a notice to the Contractor stating the nature of the default and requiring the Contractor to remedy the same. If the Contractor fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice, then the Employer may terminate the Contract forthwith by giving a notice of termination to the Contractor that refers to this GC Clause 7.4.4.
7.4.6 Upon receipt of the notice of termination under GC Clauses 7.4.4 or 7.4.5, the Contractor shall, either immediately or upon such date as is specified in the notice of termination:

(a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition;

(b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) below;

(c) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination;

(d) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors;

(e) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its Subcontractors as of the date of termination in connection with the Facilities.

7.4.7 The Employer may enter upon the Site, expel the Contractor, and complete the Facilities itself or by employing any third Party. The Employer may, to the exclusion of any right of the Contractor over the same, take over and use with the payment of a fair rental rate to the Contractor, with all the maintenance costs to the account of the Employer and with an indemnification by the Employer for all liability including damage or injury to persons arising out of the Employer’s use of such equipment, any Contractor’s Equipment owned by the Contractor and on the Site in connection with the Facilities for such reasonable period as the Employer considers expedient for the supply and installation of the Facilities.

Upon completion of the Facilities or at such earlier date as the Employer thinks appropriate, the Employer shall give notice to the Contractor that such Contractor’s Equipment will be returned to the Contractor at or near the Site and shall return such Contractor’s Equipment to the Contractor in accordance with such notice. The Contractor shall thereafter without delay and at its cost remove or arrange removal of the same from the Site.
7.4.8 Subject to GC Clause 7.4.9, the Contractor shall be entitled to be paid the Contract Price attributable to the Facilities executed as of the date of termination, the value of any unused or partially used Plant on the Site, and the costs, if any, incurred in protecting the Facilities and in leaving the Site in a clean and safe condition pursuant to paragraph (a) of GC Clause 7.4.6. Any sums due the Employer from the Contractor accruing prior to the date of termination shall be deducted from the amount to be paid to the Contractor under this Contract.

7.4.9 If the Employer completes the Facilities, the cost of completing the Facilities by the Employer shall be determined.

If the sum that the Contractor is entitled to be paid, pursuant to GC Clause 7.4.8, plus the reasonable costs incurred by the Employer in completing the Facilities, exceeds the Contract Price, the Contractor shall be liable for such excess.

If such excess is greater than the sums due the Contractor under GC Clause 7.4.8, the Contractor shall pay the balance to the Employer, and if such excess is less than the sums due the Contractor under GC Clause 7.4.8, the Employer shall pay the balance to the Contractor.

The Employer and the Contractor shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.
Termination by the Contractor

If

(a) the Employer has failed to pay the Contractor any sum due under the Contract within the specified period, has failed to approve any invoice or supporting documents without just cause pursuant to the Appendix to the Contract Agreement titled Terms and Procedures of Payment, or commits a substantial breach of the Contract, the Contractor may give a notice to the Employer that requires payment of such sum, with interest thereon as stipulated in GC Clause 3.2.3, requires approval of such invoice or supporting documents, or specifies the breach and requires the Employer to remedy the same, as the case may be. If the Employer fails to pay such sum together with such interest, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, fails to remedy the breach or take steps to remedy the breach within fourteen (14) days after receipt of the Contractor’s notice, or

(b) the Contractor is unable to carry out any of its obligations under the Contract for any reason attributable to the Employer, including but not limited to the Employer’s failure to provide possession of or access to the Site or other areas or failure to obtain any governmental permit necessary for the execution and/or completion of the Facilities,

then the Contractor may give a notice to the Employer thereof, and if the Employer has failed to pay the outstanding sum, to approve the invoice or supporting documents, to give its reasons for withholding such approval, or to remedy the breach within twenty-eight (28) days of such notice, or if the Contractor is still unable to carry out any of its obligations under the Contract for any reason attributable to the Employer within twenty-eight (28) days of the said notice, the Contractor may by a further notice to the Employer referring to this GC Clause 7.4.10, forthwith terminate the Contract.

The Contractor may terminate the Contract forthwith by giving a notice to the Employer to that effect, referring to this GC Clause 7.4.11, if the Employer becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, being a corporation, if a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Employer takes or suffers any other analogous action in consequence of debt.
7.4.12 If the Contract is terminated under GC Clauses 7.4.10 or 7.4.11, then the Contractor shall immediately

(a) cease all further work, except for such work as may be necessary for the purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition

(b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) (ii)

(c) remove all Contractor’s Equipment from the Site and repatriate the Contractor’s and its Subcontractors’ personnel from the Site, and

(d) subject to the payment specified in GC Clause 7.4.13,

(i) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination

(ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors, and

(iii) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its Subcontractors as of the date of termination in connection with the Facilities.

7.4.13 If the Contract is terminated under GC Clauses 7.4.10 or 7.4.11, the Employer shall pay to the Contractor all payments specified in GC Clause 7.4.3, and reasonable compensation for all loss, except for loss of profit, or damage sustained by the Contractor arising out of, in connection with or in consequence of such termination.

7.4.14 Termination by the Contractor pursuant to this GC Clause 7.4.10 is without prejudice to any other rights or remedies of the Contractor that may be exercised in lieu of or in addition to rights conferred by GC Clause 7.4.10.

7.4.15 In this GC Clause 7.4, the expression “Facilities executed” shall include all work executed, Installation Services provided, and all Plant acquired, or subject to a legally binding obligation to purchase, by the Contractor and used or intended to be used for the purpose of the Facilities, up to and including the date of termination.

7.4.16 In this GC Clause 7.4, in calculating any monies due from the Employer to the Contractor, account shall be taken of any sum previously paid by the Employer to the Contractor under the Contract, including any advance payment paid pursuant to the Appendix to the Contract Agreement titled Terms and Procedures of Payment.

7.5 Assignment
7.5.1 Neither the Employer nor the Contractor shall, without the express prior written consent of the other Party, which consent shall not be unreasonably withheld, assign to any third Party the Contract or any part thereof, or any right, benefit, obligation or interest therein or thereunder, except that the Contractor shall be entitled to assign either absolutely or by way of charge any monies due and payable to it or that may become due and payable to it under the Contract.

7.6 Export Restrictions

7.6.1 Notwithstanding any obligation under the Contract to complete all export formalities, 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 which arise from trade regulations from a country supplying those Plant and Installation Services, and which substantially impede the Contractor from meeting its obligations under the Contract, shall release the Contractor from the obligation to provide deliveries or services, always provided, however, that the Contractor can demonstrate to the satisfaction of the Employer and of the Bank that it has completed all formalities in a timely manner, including applying for permits, authorizations and licenses necessary for the export of the Plant and Installation Services under the terms of the Contract. Termination of the Contract on this basis shall be for the Employer’s convenience pursuant to Clause 7.4.1.

8 Claims, Disputes and Arbitration

8.1 Contractor’s Claims

8.1.1 If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall submit a notice to the Project Manager, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance.

If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Clause shall apply.

The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Project Manager. Without admitting the Employer’s liability, the Project Manager may, after receiving any notice under this Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary
records. The Contractor shall permit the Project Manager to inspect all these records, and shall (if instructed) submit copies to the Project Manager.

Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Project Manager, the Contractor shall send to the Project Manager a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

(a) this fully detailed claim shall be considered as interim;
(b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Project Manager may reasonably require; and
(c) the Contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Project Manager.

Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Project Manager and approved by the Contractor, the Project Manager shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within such time.

Each Payment Certificate shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.

The Project Manager shall agree with the Contractor or estimate: (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with GC Clause 7.2, and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.

The requirements of this Clause are in addition to those of any other Clause which may apply to a claim. If the Contractor fails to comply with this or another Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Clause.

In the event that the Contractor and the Employer cannot agree on any matter relating to a claim, either Party may refer the matter to the Dispute Board pursuant to GC 8.2 hereof.

8.2 Disputes and Arbitration
8.2.1 Appointment of the Dispute Board

Disputes shall be referred to a DB for decision in accordance with GC Clause 8.2.3. The Parties shall appoint a DB by the date stated in the PC.

The DB shall comprise, as stated in the PC, either one or three suitably qualified persons (“the members”), each of whom shall be fluent in the language for communication defined in the Contract and shall be a professional experienced in the type of activities involved in the performance of the Contract and with the interpretation of contractual documents. If the number is not so stated and the Parties do not agree otherwise, the DB shall comprise three persons, one of whom shall serve as chairman.

If the Parties have not jointly appointed the DB 21 days before the date stated in the PC and the DB is to comprise three persons, each Party shall nominate one member for the approval of the other Party. The first two members shall recommend and the Parties shall agree upon the third member, who shall act as chairman.

However, if a list of potential members is included in the PC, the members shall be selected from those on the list, other than anyone who is unable or unwilling to accept appointment to the DB.

The agreement between the Parties and either the sole member or each of the three members shall incorporate by reference the General Conditions of Dispute Board Agreement contained in the Annex A to these General Conditions, with such amendments as are agreed between them.

The terms of the remuneration of either the sole member or each of the three members, including the remuneration of any expert whom the DB consults, shall be mutually agreed upon by the Parties when agreeing the terms of appointment of the member or such expert (as the case may be). Each Party shall be responsible for paying one-half of this remuneration.

If a member declines to act or is unable to act as a result of death, disability, resignation or termination of appointment, a replacement shall be appointed in the same manner as the replaced person was required to have been nominated or agreed upon, as described in this Clause.

The appointment of any member may be terminated by mutual agreement of both Parties, but not by the Employer or the Contractor acting alone. Unless otherwise agreed by both Parties, the appointment of the DB (including each member) shall expire when the Operational Acceptance Certificate has been issued in accordance with GC Clause 4.9.6.
8.2.2 Failure to Agree on the Composition of the Dispute Board

If any of the following conditions apply, namely:

(a) the Parties fail to agree upon the appointment of the sole member of the DB by the date stated in the first paragraph of GC Clause 8.2.1,
(b) either Party fails to nominate a member (for approval by the other Party) of a DB of three persons by such date,
(c) the Parties fail to agree upon the appointment of the third member (to act as chairman) of the DB by such date, or
(d) the Parties fail to agree upon the appointment of a replacement person within 42 days after the date on which the sole member or one of the three members declines to act or is unable to act as a result of death, disability, resignation or termination of appointment,

then the appointing entity or official named in the PC shall, upon the request of either or both of the Parties and after due consultation with both Parties, appoint this member of the DB. This appointment shall be final and conclusive. Each Party shall be responsible for paying one-half of the remuneration of the appointing entity or official.

8.2.3 Obtaining Dispute Board’s Decision

If a dispute (of any kind whatsoever) arises between the Parties in connection with the performance of the Contract, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Project Manager, either Party may refer the dispute in writing to the DB for its decision, with copies to the other Party and the Project Manager. Such reference shall state that it is given under this Clause.

For a DB of three persons, the DB shall be deemed to have received such reference on the date when it is received by the chairman of the DB.

Both Parties shall promptly make available to the DB all such additional information, further access to the Site, and appropriate facilities, as the DB may require for the purposes of making a decision on such dispute. The DB shall be deemed to be not acting as arbitrator(s).
8.2.3 ctd Clause

Within 84 days after receiving such reference, or within such other period as
may be proposed by the DB and approved by both Parties, the DB shall give
its decision, which shall be reasoned and shall state that it is given under this
Clause. The decision shall be binding on both Parties, who shall promptly give
effect to it unless and until it shall be revised in an amicable settlement or an
arbitral award as described below. Unless the Contract has already been
abandoned, repudiated or terminated, the Contractor shall continue with the
performance of the Facilities in accordance with the Contract.

If either Party is dissatisfied with the DB’s decision, then either Party may,
within 28 days after receiving the decision, give notice to the other Party of its
dissatisfaction and intention to commence arbitration. If the DB fails to give
its decision within the period of 84 days (or as otherwise approved) after
receiving such reference, then either Party may, within 28 days after this
period has expired, give notice to the other Party of its dissatisfaction and
intention to commence arbitration.

In either event, this notice of dissatisfaction shall state that it is given under
this Clause, and shall set out the matter in dispute and the reason(s) for
dissatisfaction. Except as stated in GC Clauses 8.2.6 and 8.2.7, neither Party
shall be entitled to commence arbitration of a dispute unless a notice of
dissatisfaction has been given in accordance with this Clause.

If the DB has given its decision as to a matter in dispute to both Parties, and
no notice of dissatisfaction has been given by either Party within 28 days after
it received the DB’s decision, then the decision shall become final and binding
upon both Parties.

8.2.4 Amicable Settlement

Where notice of dissatisfaction has been given under GC Clause 8.2.3 above,
both Parties shall attempt to settle the dispute amicably before the
commencement of arbitration. However, unless both Parties agree otherwise,
arbitration may be commenced on or after the fifty-sixth day after the day on
which notice of dissatisfaction and intention to commence arbitration was
given, even if no attempt at amicable settlement has been made.
8.2.5 Arbitration

Unless indicated otherwise in the PC, any dispute not settled amicably and in respect of which the DB’s decision (if any) has not become final and binding shall be finally settled by arbitration. Unless otherwise agreed by both Parties, arbitration shall be conducted as follows:

(a) For contracts with foreign contractors:
   (i) international arbitration with proceedings administered by the international arbitration institution appointed in the PC, in accordance with the rules of arbitration of the appointed institution;
   (ii) the place of arbitration shall be the city where the headquarters of the appointed arbitration institution is located or such other place selected in accordance with the applicable arbitration rules; and
   (iii) the arbitration shall be conducted in the language for communications defined in Clause 1.4; and

(b) For contracts with domestic contractors, arbitration with proceedings conducted in accordance with the laws of the Employer’s country. ... The arbitrator(s) shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Project Manager, and any decision of the DB, relevant to the dispute. Nothing shall disqualify the Project Manager from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute.

Neither Party shall be limited in the proceedings before the arbitrator(s) to the evidence or arguments previously put before the DB to obtain its decision, or to the reasons for dissatisfaction given in its notice of dissatisfaction. Any decision of the DB shall be admissible in evidence in the arbitration.

Arbitration may be commenced prior to or after completion of the Facilities. The obligations of the Parties, the Project Manager and the DB shall not be altered by reason of any arbitration being conducted during the progress of the Facilities.

8.2.6 Failure to Comply with Dispute Board’s Decision

In the event that a Party fails to comply with a DB decision which has become final and binding, then the other Party may, without prejudice to any other rights it may have, refer the failure itself to arbitration under GC Clause 8.2.5. GC Clauses 8.2.3 and 8.2.4 shall not apply to this reference.
8.2.7 Expiry of Dispute Board’s Appointment

If a dispute arises between the Parties in connection with the performance of the Contract, and there is no DB in place, whether by reason of the expiry of the DB’s appointment or otherwise:

(a) GC Clauses 8.2.3 and 8.2.4 shall not apply, and
(b) the dispute may be referred directly to arbitration under GC Clause 8.2.5
ANNEX A

General Conditions of Dispute Board Agreement

1 Definitions

Each “Dispute Board Agreement” is a tripartite agreement by and between:

the “Employer”;
the “Contractor”; and

the “Member” who is defined in the Dispute Board Agreement as being:

(i) the sole member of the "DB" and, where this is the case, all references to the “Other Members” do not apply, or

(ii) one of the three persons who are jointly called the “DB” (or “dispute board”) and, where this is the case, the other two persons are called the “Other Members”.

The Employer and the Contractor have entered (or intend to enter) into a contract, which is called the "Contract" and is defined in the Dispute Board Agreement, which incorporates this Appendix. In the Dispute Board Agreement, words and expressions which are not otherwise defined shall have the meanings assigned to them in the Contract.

2 General Provisions

Unless otherwise stated in the Dispute Board Agreement, it shall take effect on the latest of the following dates:

(a) the Commencement Date defined in the Contract,

(b) when the Employer, the Contractor and the Member have each signed the Dispute Board Agreement, or

(c) when the Employer, the Contractor and each of the Other Members (if any) have respectively each signed a dispute board agreement.

This employment of the Member is a personal appointment. At any time, the Member may give not less than 70 days’ notice of resignation to the Employer and to the Contractor, and the Dispute Board Agreement shall terminate upon the expiry of this period.

3 Warranties

The Member warrants and agrees that he/she is and shall be impartial and independent of the Employer, the Contractor and the Project Manager. The Member shall promptly disclose, to each of them and to the Other Members (if any), any fact or circumstance which might appear inconsistent with his/her warranty and agreement of impartiality and independence.
When appointing the Member, the Employer and the Contractor relied upon the Member’s representations that he/she is:

(a) experienced in the work which the Contractor is to carry out under the Contract,
(b) experienced in the interpretation of contract documentation, and
(c) fluent in the language for communications defined in the Contract.

4 General Obligations of the Member

The Member shall:

(a) have no interest financial or otherwise in the Employer, the Contractor or the Project Manager, nor any financial interest in the Contract except for payment under the Dispute Board Agreement;

(b) not previously have been employed as a consultant or otherwise by the Employer, the Contractor or the Project Manager, except in such circumstances as were disclosed in writing to the Employer and the Contractor before they signed the Dispute Board Agreement;

(c) have disclosed in writing to the Employer, the Contractor and the Other Members (if any), before entering into the Dispute Board Agreement and to his/her best knowledge and recollection, any professional or personal relationships with any director, officer or employee of the Employer, the Contractor or the Project Manager, and any previous involvement in the overall project of which the Contract forms part;

(d) not, for the duration of the Dispute Board Agreement, be employed as a consultant or otherwise by the Employer, the Contractor or the Project Manager, except as may be agreed in writing by the Employer, the Contractor and the Other Members (if any);

(e) comply with the annexed procedural rules and with GC Clause 8.2.3;

(f) not give advice to the Employer, the Contractor, the Employer’s Personnel or the Contractor’s Personnel concerning the conduct of the Contract, other than in accordance with the annexed procedural rules;

(g) not while a Member enter into discussions or make any agreement with the Employer, the Contractor or the Project Manager regarding employment by any of them, whether as a consultant or otherwise, after ceasing to act under the Dispute Board Agreement;

(h) ensure his/her availability for all site visits and hearings as are necessary;

(i) become conversant with the Contract and with the progress of the Facilities (and of any other parts of the project of which the Contract forms part) by studying all documents received which shall be maintained in a current working file;
(j) treat the details of the Contract and all the DB’s activities and hearings as private and confidential, and not publish or disclose them without the prior written consent of the Employer, the Contractor and the Other Members (if any); and

(k) be available to give advice and opinions, on any matter relevant to the Contract when requested by both the Employer and the Contractor, subject to the agreement of the Other Members (if any).

5 General Obligations of the Employer and the Contractor

The Employer, the Contractor, the Employer’s Personnel and the Contractor’s Personnel shall not request advice from or consultation with the Member regarding the Contract, otherwise than in the normal course of the DB’s activities under the Contract and the Dispute Board Agreement. The Employer and the Contractor shall be responsible for compliance with this provision, by the Employer’s Personnel and the Contractor’s Personnel respectively.

The Employer and the Contractor undertake to each other and to the Member that the Member shall not, except as otherwise agreed in writing by the Employer, the Contractor, the Member and the Other Members (if any):

(a) be appointed as an arbitrator in any arbitration under the Contract;

(b) be called as a witness to give evidence concerning any dispute before arbitrator(s) appointed for any arbitration under the Contract; or

(c) be liable for any claims for anything done or omitted in the discharge or purported discharge of the Member’s functions, unless the act or omission is shown to have been in bad faith.

The Employer and the Contractor hereby jointly and severally indemnify and hold the Member harmless against and from claims from which he is relieved from liability under the preceding paragraph.

Whenever the Employer or the Contractor refers a dispute to the DB under GC Clause 8.2.3, which will require the Member to make a site visit and attend a hearing, the Employer or the Contractor shall provide appropriate security for a sum equivalent to the reasonable expenses to be incurred by the Member. No account shall be taken of any other payments due or paid to the Member.

6 Payment

The Member shall be paid as follows, in the currency named in the Dispute Board Agreement:

(a) a retainer fee per calendar month, which shall be considered as payment in full for:

   (i) being available on 28 days’ notice for all site visits and hearings;

   (ii) becoming and remaining conversant with all project developments and maintaining relevant files;
(iii) all office and overhead expenses including secretarial services,
photocopying and office supplies incurred in connection with his duties; and

(iv) all services performed hereunder except those referred to in sub-paragraphs (b) and (c) of this Clause.

The retainer fee shall be paid with effect from the last day of the calendar month in which the Dispute Board Agreement becomes effective; until the last day of the calendar month in which the Taking-Over Certificate is issued for the whole of the Facilities.

With effect from the first day of the calendar month following the month in which Taking-Over Certificate is issued for the whole of the Facilities, the retainer fee shall be reduced by one third. This reduced fee shall be paid until the first day of the calendar month in which the Member resigns or the Dispute Board Agreement is otherwise terminated.

(b) a daily fee which shall be considered as payment in full for:

(i) each day or part of a day up to a maximum of two days’ travel time in each direction for the journey between the Member’s home and the site, or another location of a meeting with the Other Members (if any);

(ii) each working day on site visits, hearings or preparing decisions; and

(iii) each day spent reading submissions in preparation for a hearing.

(c) all reasonable expenses including necessary travel expenses (air fare in less than first class, hotel and subsistence and other direct travel expenses) incurred in connection with the Member’s duties, as well as the cost of telephone calls, courier charges, faxes and telexes: a receipt shall be required for each item in excess of five percent of the daily fee referred to in sub-paragraph (b) of this Clause;

(d) any taxes properly levied in the Country on payments made to the Member (unless a national or permanent resident of the Country) under this Clause 6.

The retainer and daily fees shall be as specified in the Dispute Board Agreement. Unless it specifies otherwise, these fees shall remain fixed for the first 24 calendar months, and shall thereafter be adjusted by agreement between the Employer, the Contractor and the Member, at each anniversary of the date on which the Dispute Board Agreement became effective.

If the Parties fail to agree on the retainer fee or the daily fee the appointing entity or official named in the PC shall determine the amount of the fees to be used.

The Member shall submit invoices for payment of the monthly retainer and air fares quarterly in advance. Invoices for other expenses and for daily fees shall be submitted following the conclusion of a site visit or hearing. All invoices shall be accompanied by a brief description of activities performed during the relevant period and shall be addressed to the Contractor.

The Contractor shall pay each of the Member’s invoices in full within 56 calendar days after receiving each invoice and shall apply to the Employer (in the Statements under the Contract)
for reimbursement of one-half of the amounts of these invoices. The Employer shall then pay the Contractor in accordance with the Contract.

If the Contractor fails to pay to the Member the amount to which he/she is entitled under the Dispute Board Agreement, the Employer shall pay the amount due to the Member and any other amount which may be required to maintain the operation of the DB; and without prejudice to the Employer’s rights or remedies. In addition to all other rights arising from this default, the Employer shall be entitled to reimbursement of all sums paid in excess of one-half of these payments, plus all costs of recovering these sums and financing charges calculated at the rate specified in accordance with GC Clause 3.2.3.

If the Member does not receive payment of the amount due within 70 days after submitting a valid invoice, the Member may (i) suspend his/her services (without notice) until the payment is received, and/or (ii) resign his/her appointment by giving notice under Clause 7.

7 Termination

At any time: (i) the Employer and the Contractor may jointly terminate the Dispute Board Agreement by giving 42 days’ notice to the Member; or (ii) the Member may resign as provided for in Clause 2.

If the Member fails to comply with the Dispute Board Agreement, the Employer and the Contractor may, without prejudice to their other rights, terminate it by notice to the Member. The notice shall take effect when received by the Member.

If the Employer or the Contractor fails to comply with the Dispute Board Agreement, the Member may, without prejudice to his other rights, terminate it by notice to the Employer and the Contractor. The notice shall take effect when received by them both.

Any such notice, resignation and termination shall be final and binding on the Employer, the Contractor and the Member. However, a notice by the Employer or the Contractor, but not by both, shall be of no effect.

8 Default of the Member

If the Member fails to comply with any of his obligations under Clause 4 concerning his impartiality or independence in relation to the Employer or the Contractor, he/she shall not be entitled to any fees or expenses hereunder and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses received by the Member and the Other Members (if any), for proceedings or decisions (if any) of the DB which are rendered void or ineffective by the said failure to comply.

9 Disputes

Any dispute or claim arising out of or in connection with this Dispute Board Agreement, or the breach, termination or invalidity thereof, shall be finally settled by institutional arbitration. If no other arbitration institute is agreed, the arbitration shall be conducted under the Rules of Arbitration of the International Chamber of Commerce by one arbitrator appointed in accordance with these Rules of Arbitration.
DISPUTE BOARD GUIDELINES

1. Unless otherwise agreed by the Employer and the Contractor, the DB shall visit the site at intervals of not more than 140 days, including times of critical construction events, at the request of either the Employer or the Contractor. Unless otherwise agreed by the Employer, the Contractor and the DB, the period between consecutive visits shall not be less than 70 days, except as required to convene a hearing as described below.

2. The timing of and agenda for each site visit shall be as agreed jointly by the DB, the Employer and the Contractor, or in the absence of agreement, shall be decided by the DB. The purpose of site visits is to enable the DB to become and remain acquainted with the progress of the Facilities and of any actual or potential problems or claims, and, as far as reasonable, to prevent potential problems or claims from becoming disputes.

3. Site visits shall be attended by the Employer, the Contractor and the Project Manager and shall be co-ordinated by the Employer in co-operation with the Contractor. The Employer shall ensure the provision of appropriate conference facilities and secretarial and copying services. At the conclusion of each site visit and before leaving the site, the DB shall prepare a report on its activities during the visit and shall send copies to the Employer and the Contractor.

4. The Employer and the Contractor shall furnish to the DB one copy of all documents which the DB may request, including Contract documents, progress reports, variation instructions, certificates and other documents pertinent to the performance of the Contract. All communications between the DB and the Employer or the Contractor shall be copied to the other Party. If the DB comprises three persons, the Employer and the Contractor shall send copies of these requested documents and these communications to each of these persons.

5. If any dispute is referred to the DB in accordance with GC Clause 8.2.3, the DB shall proceed in accordance with GC Clause 8.2.3 and these Guidelines. Subject to the time allowed to give notice of a decision and other relevant factors, the DB shall:

   (a) act fairly and impartially as between the Employer and the Contractor, giving each of them a reasonable opportunity of putting his case and responding to the other’s case, and

   (b) adopt procedures suitable to the dispute, avoiding unnecessary delay or expense.

6. The DB may conduct a hearing on the dispute, in which event it will decide on the date and place for the hearing and may request that written documentation and arguments from the Employer and the Contractor be presented to it prior to or at the hearing.
7. Except as otherwise agreed in writing by the Employer and the Contractor, the DB shall have power to adopt an inquisitorial procedure, to refuse admission to hearings or audience at hearings to any persons other than representatives of the Employer, the Contractor and the Project Manager, and to proceed in the absence of any Party who the DB is satisfied received notice of the hearing; but shall have discretion to decide whether and to what extent this power may be exercised.

8. The Employer and the Contractor empower the DB, among other things, to:

(a) establish the procedure to be applied in deciding a dispute,

(b) decide upon the DB’s own jurisdiction, and as to the scope of any dispute referred to it,

(c) conduct any hearing as it thinks fit, not being bound by any rules or procedures other than those contained in the Contract and these Guidelines,

(d) take the initiative in ascertaining the facts and matters required for a decision,

(e) make use of its own specialist knowledge, if any,

(f) decide upon the payment of financing charges in accordance with the Contract,

(g) decide upon any provisional relief such as interim or conservatory measures,

(h) open up, review and revise any certificate, decision, determination, instruction, opinion or valuation of the Project Manager, relevant to the dispute, and

(i) appoint, should the DB so consider necessary and the Parties agree, a suitable expert at the cost of the Parties to give advice on a specific matter relevant to the dispute.

9. The DB shall not express any opinions during any hearing concerning the merits of any arguments advanced by the Parties. Thereafter, the DB shall make and give its decision in accordance with GC Clause 8.2.3, or as otherwise agreed by the Employer and the Contractor in writing. If the DB comprises three persons:

(a) it shall convene in private after a hearing, in order to have discussions and prepare its decision;

(b) it shall endeavour to reach a unanimous decision: if this proves impossible the applicable decision shall be made by a majority of the Members, who may require the minority Member to prepare a written report for submission to the Employer and the Contractor; and

(c) if a Member fails to attend a meeting or hearing, or to fulfil any required function, the other two Members may nevertheless proceed to make a decision, unless:

(i) either the Employer or the Contractor does not agree that they do so, or
(ii) the absent Member is the chairman and he/she instructs the other Members to not make a decision.
## Section VIII. Particular Conditions

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<th>Particular Conditions</th>
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</thead>
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<td><strong>Introduction</strong></td>
</tr>
<tr>
<td><strong>GC 1.1.2.2</strong></td>
</tr>
</tbody>
</table>
| The Employer is: **Association of Power Utilities of Africa (APUA)**  
06 BP 1444 Abidjan 06  
2 plateaux Vallons, 3rd installment lot 1761 Tel: (+225) 22 516 100  
Website: www.apua-aeea.org.  |
| **GC 1.1.2.4**        |
| The Project Manager is: **African Network of Center of Excellence in Electricity (ANCEE)**  
06 BP 1444 Abidjan 06  
2 plateaux Vallons, 3rd installment lot 1761 Tel: (+225) 22 516 100  
E-mail: ancee.racee@apua-aeea.org - Website: www.ancee-racee.org.  |
| **GC 1.1.2.7**        |
| The DB shall be:      |
| Name of DB member(s): |
| - A representative of the contracting authority  
- A representative of the contractor  
- A commun representative of the contracting authority and the contractor  |
<p>| <strong>GC 1.1.2.8</strong>        |
| The Bank is: <strong>African Development Bank (ADB)</strong>  |
| <strong>GC 1.1.2.9</strong>        |
| The Borrower is: <strong>Association of Power Utilities of Africa (APUA)</strong>  |</p>
<table>
<thead>
<tr>
<th>GC 1.1.6.6</th>
<th>The Sites are:</th>
</tr>
</thead>
</table>
| **Lot 1:** | **I1 et I2 : Kafue Gorge Regional Training Center.**  
| | P.O. Box 32774, Lusaka ZA 10101,Zambia or  
| | P.O. Box 35, Namalundu, Zambia  
| | Tél: (+260) 211 363947 (+260) 211 371007/8  
| | E-mail: info@kgrtc.org.zm or frontdesk@kgrtc.org.zm |
| **Lot 2 : Centre des Métiers de l’Electricité (CME)** |  
| Bingerville (Abidjan – Côte d’Ivoire) | Tél : +(225) 21 23 66 01 |
| **Lot 3 National Training Power Institute of Nigeria (NAPTIN),** |  
| Corporate Head Office, Plot 21 Cadastral Zone,  
| Idu Industrial Layout, Abuja, Nigeria |
| **II 2 :** |  
| **Lot 4 : Centre des Sciences Technique en Electricité (CSTE)** |  
| Route 110 (bd Chefchaouni) ; Km 9 500, Aîn Sebaâ Casablanca- Maroc | Tél : (+212) 05 22 35 04 57 |
| **Lot 5 : Egyptian Electricity Holding Company (EEHC)** |  
| 3 Nasr Road, Nasr City  
| Caire - Egypt | Téléphone : (+20) 2 261 6306 |
| **Lot 6 : Centre de formation et de Perfectionnement de la Société Tunisienne de l’Electricité et du Gaz (STEG)** |  
| 8 rue Kamel Ataturk 1080 Tunis - Tunisie | E-mail : dpsc@steg.com.tn  
<p>| | Tél : (+216) 71 341 311 |
| <strong>GC 1.3.1.(a)</strong> | The means of communication shall be: Mail and physical letter |</p>
<table>
<thead>
<tr>
<th>GC 1.3.1.(b)</th>
<th>The Employer’s address for the purpose of communications is: Coordination Unit of African Network of Center of Excellence in Electricity (ANCEE) 06 BP 1444 Abidjan 06- 2 plateaux Vallons, 3rd installment lot 1761 Tel: (+225) 22 516 114/117 - E-mail: <a href="mailto:ancee.racee@apua-asea.org">ancee.racee@apua-asea.org</a> The Contractor’s address for the purpose of communications is: [State full address, telephone, fax and e-mail]</th>
</tr>
</thead>
<tbody>
<tr>
<td>GC 1.4.1</td>
<td>The language of the contract is the French language since the applicable law indicated is French and the working language of Côte d'Ivoire is French</td>
</tr>
<tr>
<td>GC 1.6.1</td>
<td>Deadline for entering into a Contract: after will be 28 days after the Contractor has received the Notification Letter</td>
</tr>
<tr>
<td>GC 1.11.2.(a)</td>
<td>The permits, approvals and/or licenses, to be acquired and paid for by the Employer are: all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located, which (i) such authorities or undertakings require the Employer to obtain in the Employer’s name, and (ii) are necessary for the execution of the Contract, including those required for the performance by both the Contractor and the Employer of their respective obligations under the Contract;</td>
</tr>
<tr>
<td>GC 1.11.2.(b)</td>
<td>The other permits, approvals and/or licenses, to be acquired by the Contractor, that are not the responsibility of the Employer under GC Clause 1.11.2(a) are: all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located which such authorities or undertakings require the Contractor to obtain in its name and which are necessary for the performance of the Contract, including, without limitation, visas for the Contractor’s and Subcontractor’s personnel and entry permits for all imported Contractor’s Equipment. The Contractor shall acquire all other permits, approvals and/or licenses that are not the responsibility of the Employer under GC Clause 1.11.2(a) hereof and that are necessary for the performance of the Contract. The Contractor shall indemnify and hold harmless the Employer from and against any and all liabilities, damages, claims, fines, penalties and expenses of whatever nature arising or resulting from the violation of such laws by the Employer its personnel, including the Subcontractors and their personnel, but without prejudice to GC Clause 2.4.1.</td>
</tr>
<tr>
<td>GC 1.12.1</td>
<td>The individuals or firms in a joint venture, consortium or association shall jointly and severally liable.</td>
</tr>
<tr>
<td>GC 2.1</td>
<td>Scope of Facilities</td>
</tr>
<tr>
<td>GC 2.1.3</td>
<td>The spare parts required for the operation and maintenance of the Facilities, the period, and the provisions shall be: Ten (10) years</td>
</tr>
<tr>
<td>GC 2.2</td>
<td>Time for Commencement and Completion</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>GC 2.2.1</td>
<td>The Contractor shall commence work on the Facilities within <strong>twenty-five (25) days</strong> from the Effective Date for determining Time for Completion as specified in the Contract Agreement.</td>
</tr>
<tr>
<td>GC 2.2.2</td>
<td>The Time for Completion of the whole of the Facilities shall be <strong>sixty (60) in</strong> days from the Effective Date as described in the Contract Agreement.</td>
</tr>
<tr>
<td>GC 2.3</td>
<td><strong>Contractor’s Responsibilities</strong></td>
</tr>
<tr>
<td>GC 2.3.7</td>
<td>The individuals or firms in a joint venture, consortium, or association (JVCA) <strong>shall be</strong> jointly and severally liable.</td>
</tr>
<tr>
<td>GC 3.1</td>
<td><strong>Contract Price</strong></td>
</tr>
<tr>
<td>GC 3.1.2</td>
<td>Sample Provision [to be inserted only if Contract Price is subject to adjustment (Not applicable)]</td>
</tr>
<tr>
<td>GC 3.3</td>
<td><strong>Securities</strong></td>
</tr>
<tr>
<td>GC 3.3.3</td>
<td>The amount of performance security, as a percentage of the Contract Price for the Facility or for the part of the Facility for which a separate Time for Completion is provided, shall be: <strong>Ten percent (10%) of the contract.</strong></td>
</tr>
<tr>
<td>GC 3.3.4</td>
<td><strong>Sample Clause</strong></td>
</tr>
<tr>
<td></td>
<td>The performance security shall be in the form of the <strong>Bank Guarantee</strong> furnished in Section IX, Contract Forms.</td>
</tr>
<tr>
<td>GC 3.3.5</td>
<td>The performance security shall not be reduced on the date of the Operational Acceptance.</td>
</tr>
<tr>
<td>GC 4.6</td>
<td><strong>Installation</strong></td>
</tr>
<tr>
<td>GC 4.6.7</td>
<td>Working Hours (Not applicable)</td>
</tr>
<tr>
<td>GC 4.6.10</td>
<td>Funeral Arrangements (None)</td>
</tr>
<tr>
<td>GC 4.9</td>
<td><strong>Commissioning and Operational Acceptance</strong></td>
</tr>
<tr>
<td>GC 4.9.5</td>
<td>The Guarantee Test of the Facilities shall be successfully completed within Seven (7) of days from the date of Completion.</td>
</tr>
<tr>
<td>GC 5.1</td>
<td><strong>Completion Time Guarantee</strong></td>
</tr>
<tr>
<td>GC 5.1.2</td>
<td>Applicable rate for liquidated damages: <strong>is 0.5% per week of the contract amount.</strong></td>
</tr>
<tr>
<td>GC 5.1.3</td>
<td>GC 5.1.3 No bonus will be given for earlier Completion of the Facilities or part thereof.</td>
</tr>
<tr>
<td>GC 5.2</td>
<td>Defect Liability</td>
</tr>
<tr>
<td>GC 5.2.2</td>
<td>All equipment will be covered by warranty over a period of 5 years</td>
</tr>
<tr>
<td>GC 5.2.10</td>
<td>Warranty cover all equipment</td>
</tr>
<tr>
<td>GC 5.5</td>
<td>Limitation of Liability</td>
</tr>
<tr>
<td>GC 5.5.1</td>
<td>Sample Clause [insert the following provision if it is intended to have a limitation of liability higher than the Contract Price]</td>
</tr>
<tr>
<td></td>
<td>GC 5.5.1 (b) The multiplier of the Contract Price is: [insert multiplier] (NONE)</td>
</tr>
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<td>GC 8.2</td>
<td>Disputes and Arbitration</td>
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<td>GC 8.2.1</td>
<td>The DB shall be appointed within 28 days after the Effective Date.</td>
</tr>
<tr>
<td></td>
<td>GC 8.2.1 The DB members are:</td>
</tr>
<tr>
<td></td>
<td>▪ – A representative of the contracting authority</td>
</tr>
<tr>
<td></td>
<td>▪ A representative of the contractor</td>
</tr>
<tr>
<td></td>
<td>▪ A commun representative of the contracting authority and the contractor</td>
</tr>
<tr>
<td>GC 8.2.2</td>
<td>Appointment (if not agreed) to be made by: The ANCEE Steering Committee</td>
</tr>
<tr>
<td>GC 8.2.5</td>
<td>Procedure to settle disputes in respect of DB’s decisions: The designated arbitration institution is the United Nations Commission on International Trade Law (&quot;UNCITRAL&quot;) rules</td>
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# Section IX. Contract Forms

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</table>
Letter of Acceptance

[on letterhead paper of the Employer]

. . . . . . [date] . . . .

To: [name and address of the Contractor] . . . . . .

Subject: [Notification of Award Contract No] . . . . . .

This is to notify you that your Bid dated . . . [Insert date] . . . for execution of the . . . . . . . . [insert name of the contract and identification number, as given in the Particular Conditions] . . . . . . . for the amount of . . . . . . [insert amount (s) in figures and words and name(s) of currency(ies)], as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by us.

You are requested to furnish the Performance Security in the amount of [insert amount (s) in figures and words and name(s) of currency(ies)] within 28 days in accordance with the Conditions of Contract, using for that purpose the Performance Security Form included in Section IX, Contract Forms, of the Bidding Document.

Authorized Signature: ........................................................................................................................................
Name and Title of Signatory: .................................................................................................................................
Name of Agency: ..............................................................................................................................................
Attachment: Contract Agreement
Contract Agreement

THIS AGREEMENT is made the [insert: number] day of [insert: month], [insert: year],

BETWEEN

(1) [insert complete Name of the Employer], a corporation incorporated under the laws of [insert name of country of Employer] and having its principal place of business at [insert address of Employer] (hereinafter called “the Employer”), and (2) [insert name of Contractor], a corporation incorporated under the laws of [insert name of country of Contractor] and having its principal place of business at [insert address of Contractor] (hereinafter called “the Contractor”).

WHEREAS the Employer desires to engage the Contractor to design, manufacture, test, deliver, install, complete and commission certain Facilities, viz. [insert list of facilities] (“the Facilities”), and the Contractor has agreed to such engagement upon and subject to the terms and conditions hereinafter appearing.

NOW IT IS HEREBY AGREED as follows:

Article 1. Contract Documents

1.1 Contract Documents (Reference GC Clause 1.5.)

The following documents shall constitute the Contract between the Employer and the Contractor, and each shall be read and construed as an integral part of the Contract:

(a) This Contract Agreement and the Appendices hereto
(b) Letter of Bid and Price Schedules submitted by the Contractor
(c) Particular Conditions
(d) General Conditions
(e) Specification
(f) Drawings
(g) Other completed bidding forms submitted with the Bid
(h) Any other documents forming part of the Employer’s Requirements
(i) Any other documents shall be added here

1.2 Order of Precedence (Reference GC Clause 1.5)

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order
in which the Contract Documents are listed in Article 1.1 (Contract Documents) above.

1.3 Definitions (Reference GC Clause 1.1)

Capitalized words and phrases used herein shall have the same meanings as are ascribed to them in the General Conditions.

Article 2. Contract Price and Terms of Payment

2.1 Contract Price (Reference GC Clause 3.1)

The Employer hereby agrees to pay to the Contractor the Contract Price in consideration of the performance by the Contractor of its obligations hereunder. The Contract Price shall be the aggregate of: \[\text{insert amounts of foreign currency in words}], \[\text{insert amounts in figures}] as specified in Price Schedule No. 5 (Grand Summary), and \[\text{insert amount of local currency in words}], \[\text{insert amount in figures}], or such other sums as may be determined in accordance with the terms and conditions of the Contract.

2.2 Terms of Payment (Reference GC Clause 3.2)

The terms and procedures of payment according to which the Employer will reimburse the Contractor are given in the Appendix (Terms and Procedures of Payment) hereto.

The Employer may instruct its bank to issue an irrevocable confirmed documentary credit made available to the Contractor in a bank in the country of the Contractor. The credit shall be for an amount of \[\text{insert an amount equal to the total named in Schedule 1 less the advance payment to be made for Plant and Equipment supplied from abroad}]; and shall be subject to the Uniform Customs and Practice for Documentary Credits 1993 Revision, ICC Publication No. 500.

In the event that the amount payable under Schedule No. 1 is adjusted in accordance with GC 3.1.2 or with any of the other terms of the Contract, the Employer shall arrange for the documentary credit to be amended accordingly.

[The Employer may want to insert a similar provision for the payment of the items listed in Schedule 2.]

Article 3. Effective Date

3.1 Effective Date (Reference GC Clause 1.1)

The Effective Date from which the Time for Completion of the Facilities shall be counted is the date when all of the following conditions have been fulfilled:

(a) This Contract Agreement has been duly executed for and on behalf of the Employer and the Contractor;

(b) The Contractor has submitted to the Employer the performance security and the advance payment guarantee;
(c) The Employer has paid the Contractor the advance payment
(d) The Contractor has been advised that the documentary credit referred to in Article 2.2 above has been issued in its favor.

Each party shall use its best efforts to fulfill the above conditions for which it is responsible as soon as practicable.

3.2 If the conditions listed under 3.1 are not fulfilled within two (2) months from the date of this Contract notification because of reasons not attributable to the Contractor, the Parties shall discuss and agree on an equitable adjustment to the Contract Price and the Time for Completion and/or other relevant conditions of the Contract.

Article 4. Communications
4.1 The address of the Employer for notice purposes, pursuant to GC 1.3 is: [Insert full address, and telephone, cable, facsimile numbers and e-mail].
4.2 The address of the Contractor for notice purposes, pursuant to GC 1.3 is: [Insert full address, and telephone, cable, facsimile numbers and e-mail].

Article 5. Appendices
5.1 The Appendices listed in the attached List of Appendices shall be deemed to form an integral part of this Contract Agreement.
5.2 Reference in the Contract to any Appendix shall mean the Appendices attached hereto, and the Contract shall be read and construed accordingly.

IN WITNESS WHEREOF the Employer and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

Signed by, for and on behalf of the Employer

______________________________________________________________
[Signature]

______________________________________________________________
[Title]

in the presence of ____________________________________________
Signed by, for and on behalf of the Contractor

[Signature]

[Title]

in the presence of ________________________________

APPENDICES

Appendix 1  Terms and Procedures of Payment
Appendix 2  Price Adjustment
Appendix 3  Insurance Requirements
Appendix 4  Time Schedule
Appendix 5  List of Major Items of Plant and Installation Services and List of Approved Subcontractors
Appendix 6  Scope of Works and Supply by the Employer
Appendix 7  List of Documents for Approval or Review
Appendix 8  Functional Guarantees
Appendix 1. Terms and Procedures of Payment

The following Terms and Procedures of Payment are given as a guideline suitable for Supply and Installation Contracts. In the event that the Employer wishes to introduce different terms of payment to the following, it shall first obtain the written approval of the Bank for the terms it intends to use. If additional Price Schedules are introduced, suitable terms of payment in respect of such additional schedules must be added.

In accordance with the provisions of GC Clause 3.2 (Terms of Payment), the Employer shall pay the Contractor in the following manner and at the following times, on the basis of the Price Breakdown given in the section on Price Schedules. Payments will be made in the currencies quoted by the Bidder unless otherwise agreed between the Parties. Applications for payment in respect of part deliveries may be made by the Contractor as work proceeds.

TERMS OF PAYMENT

Schedule No. 1. Plant and Equipment Supplied from Abroad

In respect of plant and equipment supplied from abroad, the following payments shall be made:

Ten percent (10%) of the total CIP amount as an advance payment against receipt of invoice and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer. The advance payment security may be reduced in proportion to the value of the plant and equipment delivered to the site, as evidenced by shipping and delivery documents.

Eighty percent (80%) of the total or pro rata CIP amount upon Incoterm “CIP”, upon delivery to the carrier within forty-five (45) days after receipt of documents [Employer to state the required documents, such as a negotiable bill of lading, a non-negotiable sea way bill, an airway bill, a railway consignment note, a road consignment note, insurance certificate, etc].

Five percent (5%) of the total or pro rata CIP amount upon issue of the Completion Certificate, within forty-five (45) days after receipt of invoice.

Five percent (5%) of the total or pro rata CIP amount upon issue of the Operational Acceptance Certificate, within forty-five (45) days after receipt of invoice.

Schedule No. 2. Plant and Equipment Supplied from within the Employer’s Country
In respect of plant and equipment supplied from within the Employer’s country, the following payments shall be made:

Ten percent (10%) of the total EXW amount as an advance payment against receipt of invoice, and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer. The advance payment security may be reduced in proportion to the value of the plant and equipment delivered to the site, as evidenced by shipping and delivery documents.

Eighty percent (80%) of the total or pro rata EXW amount upon Incoterm “Ex-Works,” upon delivery to the carrier within forty-five (45) days after receipt of invoice and documents [Employer to state the required documents, such as a railway consignment note, a road consignment note, insurance certificate, etc.].

Five percent (5%) of the total or pro rata EXW amount upon issue of the Completion Certificate, within forty-five (45) days after receipt of invoice.

Five percent (5%) of the total or pro rata EXW amount upon issue of the Operational Acceptance Certificate, within forty-five (45) days after receipt of invoice.

Schedule No. 3. Design Services

In respect of design services for both the foreign currency and the local currency portions, the following payments shall be made:

Ten percent (10%) of the total design services amount as an advance payment against receipt of invoice, and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer.

Ninety percent (90%) of the total or pro rata design services amount upon acceptance of design in accordance with GC Clause 4.4 by the Project Manager within forty-five (45) days after receipt of invoice.

Schedule No. 4. Installation Services

In respect of installation services for both the foreign and local currency portions, the following payments shall be made:

Ten percent (10%) of the total installation services amount as an advance payment against receipt of invoice, and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer. The advance payment security may be reduced in proportion to the value of work performed by the Contractor as evidenced by the invoices for installation services.
Eighty percent (80%) of the measured value of work performed by the Contractor, as identified in the said Program of Performance, during the preceding month, as evidenced by the Employer’s authorization of the Contractor’s application, will be made monthly within forty-five (45) days after receipt of invoice.

Five percent (5%) of the total or pro rata value of installation services performed by the Contractor as evidenced by the Employer’s authorization of the Contractor’s monthly applications, upon issue of the Completion Certificate, within forty-five (45) days after receipt of invoice.

Five percent (5%) of the total or pro rata value of installation services performed by the Contractor as evidenced by the Employer’s authorization of the Contractor’s monthly applications, upon issue of the Operational Acceptance Certificate, within forty-five (45) days after receipt of invoice.

In the event that the Employer fails to make any payment on its respective due date, the Employer shall pay to the Contractor interest on the amount of such delayed payment at the rate of [insert a figure that may be different for the foreign and local currency portions and a figure that reflects the cost of money in the respective currencies] percent (___%) per month for period of delay until payment has been made in full.

PAYMENT PROCEDURES

The procedures to be followed in applying for certification and making payments shall be as follows:

[Appropriate procedures, normally through letters of credit, are to be inserted (including forms and certificates annexed as appropriate) by the Employer in the bidding documents].
Appendix 2. Price Adjustment Clause

Where the Contract Period (excluding the Defects Liability Period) exceeds eighteen (18) months, it is normal procedure that prices payable to the Contractor shall be subject to adjustment during the performance of the Contract to reflect changes occurring in the cost of labor and material components. In such cases the bidding documents shall include in this Appendix 2 a formula of the following general type, pursuant to GC Clause 3.1.2.

Where Contracts are of a shorter duration than eighteen (18) months or in cases where there is to be no Price Adjustment, the following provision shall not be included. Instead, it shall be indicated under this Appendix 2 that the prices are to remain firm and fixed for the duration of the Contract.

Sample Price Adjustment Formula

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 labor and material components, in accordance with the following formula:

\[ P_1 = P_0 \times (a + b \frac{L_1}{L_0} + c \frac{M_1}{M_0}) - P_0 \]

in which:
- \( P_1 \) = adjustment amount payable to the Contractor
- \( P_0 \) = Contract price (base price)
- \( a \) = percentage of fixed element in Contract price (\( a = \% \))
- \( b \) = percentage of labor component in Contract price (\( b = \% \))
- \( c \) = percentage of material and equipment component in Contract price (\( c = \% \))
- \( L_0, L_1 \) = labor indices applicable to the appropriate industry in the country of origin on the base date and the date for adjustment, respectively
- \( M_0, M_1 \) = material and equipment indices in the country of origin on the base date and the date for adjustment, respectively

N.B. \( a+b+c=100\% \).

Conditions Applicable To Price Adjustment

The Bidder shall indicate the source of labor and materials indices and the base date indices in its bid.
The base date shall be the date twenty-eight (28) days prior to the Bid closing date.

The date of adjustment shall be the mid-point of the period of manufacture or installation of component or Plant.

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 labor and/or materials indices, a correction factor will be applied to avoid incorrect adjustments of the Contract price. The correction factor shall correspond to the ratio of exchange rates between the two currencies on the base date and the date for adjustment as defined above.

(c) No price adjustment shall be payable on the portion of the Contract price paid to the Contractor as an advance payment.

[Note: For complex Plant supply and installation involving several sources of supply and/or a substantial amount of installation works, a family of formulas may be necessary, with provision for the usage of Contractor’s equipment in the works formula].
Appendix 3. Insurance Requirements

Details to be completed by the Employer prior to issuing the bidding documents. In the event that the Employer provides any insurances under the Contract, appropriate details must also be given.

Insurances To Be Taken Out By The Contractor

In accordance with the provisions of GC Clause 6.4, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, such approval not to be unreasonably withheld.

(a) Cargo Insurance
Covering loss or damage occurring, while in transit from the supplier’s or manufacturer’s works or stores until arrival at the Site, to the Facilities (including spare parts therefor) and to the construction equipment to be provided by the Contractor or its Subcontractors.

<table>
<thead>
<tr>
<th>Amount [in currency(ies)]</th>
<th>Deductible limits</th>
<th>Parties insured</th>
<th>From [place]</th>
<th>To [place]</th>
</tr>
</thead>
</table>

(b) Installation All Risks Insurance
Covering physical loss or damage to the Facilities at the Site, occurring prior to completion of the Facilities, with an extended maintenance coverage for the Contractor’s liability in respect of any loss or damage occurring during the defect liability period while the Contractor is on the Site for the purpose of performing its obligations during the defect liability period.

<table>
<thead>
<tr>
<th>Amount [in currency(ies)]</th>
<th>Deductible limits</th>
<th>Parties insured</th>
<th>From [place]</th>
<th>To [place]</th>
</tr>
</thead>
</table>

(c) Third Party Liability Insurance
Covering bodily injury or death suffered by third parties (including the Employer’s personnel) and loss of or damage to property (including the Employer’s property and any parts of the Facilities that have been accepted by the Employer) occurring in connection with the supply and installation of the Facilities.

<table>
<thead>
<tr>
<th>Amount [in currency(ies)]</th>
<th>Deductible limits</th>
<th>Parties insured</th>
<th>From [place]</th>
<th>To [place]</th>
</tr>
</thead>
</table>
(d) **Automobile Liability Insurance**
Covering use of all vehicles used by the Contractor or its Subcontractors (whether or not owned by them) in connection with the supply and installation of the Facilities. Comprehensive insurance in accordance with statutory requirements.

(e) **Workers’ Compensation**
In accordance with the statutory requirements applicable in any country where the Facilities or any part thereof is executed.

(f) **Employer’s Liability**
In accordance with the statutory requirements applicable in any country where the Facilities or any part thereof is executed.

(g) **Other Insurances**
The Contractor is also required to take out and maintain at its own cost the following insurances:

<table>
<thead>
<tr>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
</tr>
<tr>
<td>[in currency(ies)]</td>
</tr>
</tbody>
</table>

The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GC Clause 6.4.1, except for the Third Party Liability, Workers’ Compensation and Employer’s Liability Insurances, and the Contractor’s Subcontractors shall be named as co-insureds under all insurance policies taken out by the Contractor pursuant to GC Clause 6.4.1, except for the Cargo, Workers’ Compensation and Employer’s Liability Insurances. All insurer’s rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies.
Insurances To Be Taken Out By The Employer

If the Employer is proposing to take out any or all of the above insurances itself, or any other insurances in respect of the Facilities, either in its own name or in the joint names of itself and the Contractor, it shall give details below prior to issuing the bidding documents. Under the terms of the Contract, the Contractor and the Contractor’s Subcontractors shall be named as co-insureds under all such policies.

The Employer shall at its expense take out and maintain in effect during the performance of the Contract the following insurances.

Details:

<table>
<thead>
<tr>
<th>Amount [in currency(ies)]</th>
<th>Deductible limits</th>
<th>Parties insured [names]</th>
<th>From [place]</th>
<th>To [place]</th>
</tr>
</thead>
</table>

...
Appendix 4. Time Schedule

The Employer should normally provide a Time Schedule to be followed by the Contractor during the performance of the Contract. This schedule should be provided with the bidding documents under this Appendix. All completion times indicated must be in accordance with the information regarding Time(s) for Completion given in the Bid Data Sheet.

Except under exceptional circumstances, the Time Schedule should indicate periods of time (e.g., weeks or months) and not specify calendar dates. All periods should be shown from the Effective Date of the Contract.

Should it become necessary to amend the Time Schedule to reflect any agreements made with the selected Bidder prior to award of Contract, the amended Time Schedule shall replace the original Time Schedule prior to signature of the Contract Agreement.

If the bidding documents contain no Time Schedule, the Bidder shall be required to submit with its bid a detailed program, normally in the form of a bar chart, showing how and the order in which it intends to perform the Contract and showing the key events requiring action or decision by the Employer. In preparing this Program, the Bidder shall adhere to the Time(s) for Completion given in the Bid Data Sheet or give its reasons for not adhering thereto. The Time Schedule submitted by the selected Bidder and amended as necessary prior to award of Contract shall be included as Appendix to the Contract Agreement before the Contract is signed.
Appendix 5. List of Major Items of Plant and Installation Services and List of Approved Subcontractors

Prior to issuing the Bidding Document, the Employer shall have established a list of major item of Plant and Installation Services for which approval of the Employer is required. Prior to award of Contract, the details of approved subcontractor, including manufacturers shall be completed, indicating those subcontractors proposed by the Bidder in the corresponding Attachment to its bid that are approved by the Employer for engagement by the Contractor during the performance of the Contract.

A list of major items of Plant and Installation Services is provided below.

The following Subcontractors and/or manufacturers are approved for carrying out the items of the Facilities indicated below. Where more than one Subcontractor is listed, the Contractor is free to choose between them, but it must notify the Employer of its choice in good time prior to appointing any selected Subcontractor. In accordance with GC Clause 4.3.1, the Contractor is free to submit proposals for Subcontractors for additional items from time to time. No Subcontracts shall be placed with any such Subcontractors for additional items until the Subcontractors have been approved in writing by the Employer and their names have been added to this list of Approved Subcontractors.

<table>
<thead>
<tr>
<th>Major Items of Plant and Installation Services</th>
<th>Approved Subcontractors/Manufacturers</th>
<th>Nationality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 6. Scope of Works and Supply by the Employer

Prior to issuing the bidding documents, the Employer shall indicate in this Appendix details of all personnel and Facilities it will provide for use by the Contractor and indicate, where applicable, the charges that it will make in respect of their use.

The Employer shall also identify any part(s) of the facilities it intends to carry out itself (or by other contractors), and any plant, equipment, or materials that it proposes to purchase itself and supply to the Contractor for incorporation in the facilities, indicating, where applicable, the charges that it will make in respect thereof.

The following personnel, facilities, works and supplies will be provided/supplied by the Employer, and the provisions of GC Clauses 3.1, 4.5 and 4.8 shall apply as appropriate.

All personnel, facilities, works and supplies will be provided by the Employer in good time so as not to delay the performance of the Contractor, in accordance with the approved Time Schedule and Program of Performance pursuant to GC Clause 4.2.2.

Unless otherwise indicated, all personnel, facilities, works and supplies will be provided free of charge to the Contractor.

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Charge to Contractor (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities</td>
<td>Charge to Contractor (if any)</td>
</tr>
<tr>
<td>Works</td>
<td>Charge to Contractor (if any)</td>
</tr>
<tr>
<td>Supplies</td>
<td>Charge to Contractor (if any)</td>
</tr>
</tbody>
</table>
Appendix 7. List of Documents for Approval or Review

Pursuant to GC Clause 4.4.4, the Contractor shall prepare, or cause its Subcontractor to prepare, and present to the Project Manager in accordance with the requirements of GC Clause 4.2.2 (Program of Performance), the following documents for

A. Approval
   1.
   2.
   3.

B. Review
   1.
   2.
   3.
Appendix 8. Functional Guarantees

1. General

This Appendix sets out
(a) the functional guarantees referred to in GC Clause 5.3 (Functional Guarantees)
(b) the preconditions to the validity of the functional guarantees, either in production and/or consumption, set forth below
(c) the minimum level of the functional guarantees
(d) the formula for calculation of liquidated damages for failure to attain the functional guarantees.

2. Preconditions

The Contractor gives the functional guarantees (specified herein) for the facilities, subject to the following preconditions being fully satisfied:

[List any conditions for the carrying out of the Guarantee Test referred to in GC Clause 4.9.4.]

3. Functional Guarantees

Subject to compliance with the foregoing preconditions, the Contractor guarantees as follows:

3.1 Production Capacity

[List here the production capacity that the Contractor is to guarantee, making sure to use, as functional guarantees, the figures offered by the Contractor in its bid.]

and/or

3.2 Raw Materials and Utilities Consumption

[List here the guaranteed items of consumption per unit of production (e.g., kg, tons, kcal, kWh, etc.) that the Contractor is to guarantee, making sure to use, as functional guarantees, the figures offered by the Contractor in its bid.]

4. Failure in Guarantees and Liquidated Damages

4.1 Failure to Attain Guaranteed Production Capacity
If the production capacity of the facilities attained in the guarantee test, pursuant to GC Clause 4.9.4, is less than the guaranteed figure specified in para. 3.1 above, but the actual production capacity attained in the guarantee test is not less than the minimum level specified in para. 4.3 below, and the Contractor elects to pay liquidated damages to the Employer in lieu of making changes, modifications and/or additions to the Facilities, pursuant to GC Clause 5.3.3, then the Contractor shall pay liquidated damages at the rate of [insert amount in the contract currency] for every complete one percent (1%) of the deficiency in the production capacity of the Facilities, or at a proportionately reduced rate for any deficiency, or part thereof, of less than a complete one percent (1%).

4.2 Raw Materials and Utilities Consumption in Excess of Guaranteed Level

[To be specified in the appropriate wording for the type of Facilities if there are consumption guarantees.]

If the actual measured figure of specified raw materials and utilities consumed per unit (or their average total cost of consumption) exceeds the guaranteed figure specified in para. 3.2 above (or their specified average total cost of consumption), but the actual consumption attained in the guarantee test, pursuant to GC Clause 4.9.4, is not more than the maximum level specified in para. 4.3 below, and the Contractor elects to pay liquidated damages to the Employer in lieu of making changes, modifications and/or additions to the Facilities pursuant to GC Clause 5.3.3, then the Contractor shall pay liquidated damages at the rate of [insert amount in the contract currency] for every complete one percent (1%) of the excess consumption of the Facilities, or part thereof, of less than a complete one percent (1%).

[The rate of liquidated damages specified in paras. 4.1 and 4.2 above shall be at least equivalent to the rate specified in Section III, Evaluation and Qualification Criteria, for the comparison of functional guarantees provided by the bidders.]

4.3 Minimum Levels

Notwithstanding the provisions of this paragraph, if as a result of the guarantee test(s), the following minimum levels of performance guarantees (and consumption guarantees) are not attained by the Contractor, the Contractor shall at its own cost make good any deficiencies until the Facilities reach any of such minimum performance levels, pursuant to GC Clause 5.3.2:

(a) production capacity of the Facilities attained in the guarantee test: ninety-five percent (95%) of the guaranteed production capacity (the value offered by the Contractor in its bid for functional guarantees represents 100%).
and/or

(b) average total cost of consumption of all the raw materials and utilities of the Facilities: one hundred and five percent (105%) of the guaranteed figures (the figures offered by the Contractor in its bid for functional guarantees represents 100%).

4.4 Limitation of Liability

Subject to para. 4.3 above, the Contractor’s aggregate liability to pay liquidated damages for failure to attain the functional guarantees shall not exceed ______ percent (___ %) of the Contract price [the percentage specified shall not exceed ten percent (10%)].
Performance Security Form – Bank Guarantee

_________________________ [insert Bank’s Name, and Address of Issuing Branch or Office]

Beneficiary: [insert Name and Address of Employer]

Date: _____________ [insert date (e.g., day, month, and year)]

PERFORMANCE GUARANTEE No.: _____ [insert Performance Guarantee number]

We have been informed that ________ [insert complete name of Contractor] (hereinafter called "the Applicant") has entered into Contract No. [insert number] dated [insert day and month], [insert year] with you, for the execution of [insert name of contract and brief description of Facilities] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant, we [insert name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [insert amount in figures] (___) [insert amount in words]28, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Applicant is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall be reduced by half upon our receipt of:

(a) a copy of the Operational Acceptance Certificate; or

(b) a registered letter from the Applicant (i) attaching a copy of its notice requesting issuance of the Operational Acceptance Certificate and (ii) stating that the project manager has failed to issue such Certificate within the time required or provide in writing justifiable reasons why such Certificate has not been issued, so that Operational Acceptance is deemed to have occurred.

This guarantee shall expire no later than the earlier of:

27 The Employer should insert either the Bank Guarantee or the Conditional Guarantee.
28 The Guarantor shall insert an amount representing the percentage of the Contract Price specified in the Contract and denominated either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Employer.
29 This text shall be revised as and where necessary to take into account (i) partial acceptance of the Facilities in accordance with Clause 4.9.10 of the GC; and (ii) extension of the performance security when the
Section IX. Contract Forms

(a) twelve months after our receipt of either (a) or (b) above; or
(b) eighteen months after our receipt of:

(i) a copy of the Completion Certificate; or
(ii) a registered letter from the Applicant, attaching a copy of the notice to the project manager that the Facilities are ready for commissioning, and stating that fourteen days have elapsed from receipt of such notice (or seven days have elapsed if the notice was a repeated notice) and the project manager has failed to issue a Completion Certificate or inform the Applicant in writing of any defects or deficiencies; or
(iii) a registered letter from the Applicant stating that no Completion Certificate has been issued but the Employer is making use of the Facilities; or

(c) the [insert figure] day of [insert month], [insert year].

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

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

_____________________
[signature(s)]

Contractor is liable for an extended warranty obligation pursuant to Clause 5.2.10 of the GC (although in this latter case the Employer might want to consider an extended warranty security in lieu of the extension of the performance security).

Insert the date twenty-eight days after the expected expiration date of the Defect Liability Period. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: “The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Employer’s written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.”
Performance Security Form - Conditional Bank Guarantee

Date: ____________________________
Loan/Credit N°: ____________________
IFB N°: ____________________________

[Name of Contract]

To: [Name and address of Employer]

Dear Ladies and/or Gentlemen,

We refer to the Contract Agreement ("the Contract") signed on [date] between you and [name of Contractor] ("the Contractor") concerning design, execution and completion of [Brief description of the Facilities].

By this letter we, the undersigned, [name of Bank], a Bank (or company) organized under the laws of [country of Bank] and having its registered/principal office at [address of Bank], do hereby jointly and severally with the Contractor irrevocably guarantee payment owed to you by the Contractor, pursuant to the Contract, up to the sum of [amount], equivalent to [number] percent (\%) [amount shall not exceed ten percent (10%) in any case] of the Contract Price until the date of the Operational Acceptance Certificate and thereafter up to a sum of [amount], equivalent to [number] percent (\%) [amount shall not exceed five percent (5%) in any case] of the Contract Price, until twelve (12) months after the date of Operational Acceptance, or eighteen (18) months after Completion of the Facilities, whichever comes first.

Where it is agreed between you and the Contractor that the Facilities are to be accepted in parts, and thus where there are separate Completion and Operational Acceptance Certificates for each part, this Letter of Guarantee shall be apportioned to the value of each such part and shall reduce or expire as provided above on or following Completion or Operational Acceptance of each part.

We shall only undertake to make payment under this Letter of Guarantee upon our receipt of a written demand signed by your duly authorized officer for a specified sum, where such demand sets out the reasons for your claim under this Letter of Guarantee and is accompanied by

(a) a copy of the written notice sent by you to the Contractor before making the claim under this Guarantee, specifying the Contractor’s breach of contract and requesting the Contractor to remedy it
(b) a letter signed by your duly authorized officer certifying that the Contractor has failed to remedy the default within the period allowed for remedial action

(c) a copy of your written notice to the Contractor stating your intent to claim under this Letter of Guarantee because of the Contractor’s failure to remedy the default in accordance with the request referred to in para. (a) above.

Our liability under this Letter of Guarantee shall be to pay to you whichever is the lesser of the sum so requested or the amount then guaranteed hereunder in respect of any demand duly made hereunder prior to expiry of this Letter of Guarantee, without being entitled to inquire whether or not this payment is lawfully demanded.

This Letter of Guarantee shall be valid from the date of issue until the earlier of twelve (12) months after the date of Operational Acceptance or eighteen (18) months after the date of Completion of the Facilities or, where the Facilities are to be accepted in parts, twelve (12) months after the date of Operational Acceptance or eighteen (18) months after the date of Completion of the last part or [date], whichever comes first.

Except for the documents herein specified, no other documents or other action shall be required, notwithstanding any applicable law or regulation.

If the Defect Liability Period is extended with respect to any part of the Facilities in accordance with the Contract, you shall notify us, and the validity of this Letter of Guarantee shall be extended with respect to the percentage of the Contract Price stipulated in the notification until expiry of such extended Defect Liability Period.

Our liability under this Letter of Guarantee shall become null and void immediately upon its expiry, whether it is returned or not, and no claim may be made hereunder after such expiry or after the aggregate of the sums paid by us to you shall equal the sums guaranteed hereunder, whichever is the earlier.

All notices to be given hereunder shall be given by registered (airmail) post to the addressee at the address herein set out or as otherwise advised by and between the parties hereto.

We hereby agree that any part of the Contract may be amended, renewed, extended, modified, compromised, released or discharged by mutual agreement between you and the Contractor, and this security may be exchanged or surrendered without in any way impairing or affecting our liabilities hereunder without notice to us and without the necessity for any additional endorsement, consent or guarantee by us, provided, however, that the sum guaranteed shall not be increased or decreased.

No action, event or condition which by any applicable law should operate to discharge us from liability hereunder shall have any effect and we hereby waive any right we may have to apply such law, so that in all respects our liability hereunder shall be irrevocable and, except as stated herein, unconditional in all respects.
Yours truly,
[Name of the Bank]

_____________________________________________________
Authorized Signature
Advance Payment Security

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated.]

Date: [insert date (e.g., day, month, and year) of Bid Submission]
Bidding Process Reference: [insert number and title of bidding process]

[bank’s letterhead]

Beneficiary: [insert legal name and address of Employer]

ADVANCE PAYMENT GUARANTEE No.: [insert Advance Payment Guarantee no.]

We have been informed that . . . . [insert name of the Contractor], . . . . (hereinafter called “the Applicant”) has entered into Contract No. . . . . [insert reference number of the Contract], . . . . dated . . . . [insert day and month], [insert year], . . . . with you, for the execution of . . . . . [insert name of contract and brief description of Facilities] (hereinafter called “the Contract”).

Furthermore, we understand that, according to the Conditions of the Contract, an advance payment in the sum . . . . [insert currency and amount in figures]31 . . . . ( . . . . [insert currency and amount in words] . . . . ) is to be made against an advance payment guarantee.

At the request of the Applicant, we . . . . [insert name of the Bank], . . . . hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of . . . . [insert currency and amount in figures]* . . . . ( . . . . [insert currency and amount in words] . . . . ) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Applicant is in breach of its obligation under the Contract because the Applicant used the advance payment for purposes other than performing his obligations under the Contract or the costs of mobilization in respect of the Facilities, or has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

It is a condition for any claim and payment under this guarantee to be made that the advance payment referred to above must have been received by the Applicant on its account number . . . . [insert Contractor’s account number]. . . . at . . . . [insert name and address of the Bank]. . . .

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31 The Guarantor shall insert an amount representing the amount of the advance payment denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Employer.
The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as indicated in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that eighty (80) percent of the Contract Price has been certified for payment, or on the . . . day of . . ., whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

. . . . . . . . . . . . . . [Seal of Bank and Signature(s)]. . . . . . . . . . . . . .

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32 Insert the expected expiration date of the Time for Completion. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph:

"The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [insert number of months], in response to the Employer’s written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."