TENDER NO. ZICA/DFIA/TD/0009/2025

Tender for the Supply, Delivery, Installation, and Commissioning of a Hybrid Solar Backup Power Solution for ZICA Headquarters

(Open National Bidding)

June 2025

Summary Description

This Standard Bidding Document for Procurement of Small Works and its User's Guide is to be used when a prequalification process has not taken place before bidding and, therefore, post-qualification applies. A brief description of these documents is given below.

SBD for Procurement of Small Works

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 best-evaluated bid and the qualifications of the Bidder to perform the contract.

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. Employer's 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 of Contract (GCC)

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 of Contract (PCC)

This Section consists of Contract Data and Specific Provisions which 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.

User's Guide for SBD for Procurement of Small Works

This Guide to the Bidding Document, which is within the document, contains detailed explanations and recommendations on how to prepare a bidding document for a specific procurement of Small Works. The Guide is not a part of the Bidding Document.

P R O C U R E M E N T D O C U M E N T S

Procurement of:

Tender for the Supply, Delivery, Installation, and Commissioning of a Hybrid Solar Backup Power Solution for ZICA Headquarters

Issued: June 2025

ONB No:ZICA/DFIA/TD/0009/2025

ZICA

INVITATION TO BID – OPEN NATIONAL BIDDING

TENDER NO. ZICA/DFIA/TD/0009/2025

TENDER FOR THE SUPPLY, DELIVERY, INSTALLATION, AND COMMISSIONING OF A HYBRID SOLAR BACKUP POWER SOLUTION FOR ZICA HEADQUARTERS

Zambia Institute of Chartered Accountants (ZICA) is a self-regulated membership body for the accountancy profession in Zambia, which was created by an Act of parliament under the Accountants Act of 2008.

ZICA has budgeted towards the cost of installing a solar photovoltaic (PV) backup power solution to ensure uninterrupted electricity supply at its facilities and it intends to apply part of the proceeds of this financing to payments under the agreement resulting from this ITB: **Supply, delivery, installation and commissioning of a Hybrid Solar Backup Power Solution for ZICA (ZICA/DFIA/TD/0009/2025)**.

1. ***ZICA*** now invites sealed bids from eligible Bidders for the supply, delivery, installation and commissioning of a hybrid solar backup power solution for the Zambia Institute of Chartered Accountants.
2. Bidding will be conducted using the Open National Bidding (ONB) procedures and is open to all **Bidders** eligible as defined in the Bidding Documents that meet the stated qualification criteria.
3. Interested eligible Bidders may obtain further information from **ZICA** and inspect the bidding documents at the address given below. A mandatory site visit will be held on **15th July 2025** at **10:00** local time at the address given below.
4. A complete set of bidding documents in **English** may be downloaded from the ***ZICA website***. Bidding documents may be purchased at **ZICA, Accountants Park 2374/A Thabo Mbeki Road, Lusaka, Zambia** for a non-refundable fee of ***One Thousand Kwacha (K1 000.00)***. Payments for the tender document shall be made through bank transfer using the account details provided below:

   Account Name: Zambia Institute of Chartered Accountants
   Bank Name: Zambia National Commercial Bank - ZANACO
   Account No. 0027262500102
   Branch: Lusaka Centre
   Sort code: 01-00-52

5. Bids must be delivered to the address below on or before **10:00am Local time on Friday 15th August 2025.** Late bids will be rejected. Bids will be opened in the presence of Bidders' representatives who choose to attend at the address below at **10:00am Local Time on Friday 15th August 2025.**

6. Bids shall be valid for a period of **90 days** after Bid closing and must be accompanied by **Bid Securing Declaration** and shall be delivered to **ZICA, Accountants Park 2374/A Thabo Mbeki Road, Lusaka, Zambia** on or before the tender closing date and time.

Bidders should pay attention to the following information:

No.	Description	Date
1	Date of Publication of Tender	10th July 2025
2	Pre-Bid Meeting/Mandatory Site Visit	15th July 2025 at 10:00hrs Local Time
3	Last Date for requesting any clarifications	6th August 2025 at 15:00hrs Local Time
4	Last Date and Time for receiving of bids at ZICA	15th August 2025 at 10:00hrs Local Time
5	Date and Time of opening of bids	15th August 2025 at 10:00hrs Local Time

Secretary – Procurement Committee
For Chief Executive Officer

ZICA IS A MEMBER OF:

IFAC International Federation of Accountants

PAFA Pan African Federation of Accountants

Chartered Accountants Worldwide

Standard Bidding Document

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PART 1 – Bidding Procedures

Section 1 - Instructions to Bidders

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Section I - Instructions to Bidders

General

Scope of Bid

The Employer, as **indicated in the BDS**, issues this Bidding Document for the procurement of the Works as specified in Section 6 (Employer's Requirements). The name, identification, and number of contracts of this bidding are **provided in the BDS**.

Throughout this Bidding Document:

the term "in writing" means communicated in written form and delivered against receipt;
except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and
"day" means calendar day;
the term "Project Manager" refers to the officer, body or institution appointed under Section 57 of the Public Procurement Act of 2008 as Contract Manager;
"Government" refers to the Government of the Republic of Zambia, any Procuring Entity or the relevant approvals authority as defined in the Public Procurement Act of 2008; and
"ZPPA" refers to the Zambia Public Procurement Authority.

Source of Funds

The Procuring Entity **indicated in the BDS** has applied for or received financing (hereinafter called "funds") toward the cost of the project or programme **named in the BDS**. The Employer intends to apply a portion of the funds to eligible payments under the contract(s) for which this Bidding Document is issued.

Payments by the Employer will be made only at the request of the Project Manager

Fraud and Corruption

It is the Government's policy to require that Employers (including beneficiaries of the funds), as well as bidders, suppliers, and contractors and their agents (whether declared or not), personnel, subcontractors, sub-consultants, service providers and suppliers, under Government-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts.[1] In pursuance of this policy, the Government:

[1] *In this context, any action taken by a bidder, supplier, contractor, or any of its personnel, agents, sub-consultants, sub-contractors, service providers, suppliers and/or their employees to influence the procurement process or contract execution for undue advantage is improper.*

(a) 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[2];

(ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation[3];

(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;

(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

(aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Government 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

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2 *"Another party" refers to a public official acting in relation to the procurement process or contract execution]. In this context, "public official" includes Government staff and employees of other organizations taking or reviewing procurement decisions.*

3 *"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.*

4 *"Parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.*

5 *"Party" refers to a participant in the procurement process or contract execution.*

(bb) acts intended to materially impede the exercise of the Government's inspection and audit rights provided for under sub-clause 3.1 (e) below.

(b) will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;

(c) will cancel the funding allocated to a contract if it determines at any time that representatives of the Employer - engaged in corrupt, fraudulent, collusive, or coercive practices during the procurement or the execution of that contract, without the Employer having taken timely and appropriate action satisfactory to the Government to remedy the situation; and

(d) will sanction a firm or an individual, at any time, in accordance with prevailing sanctions procedures, including suspending or barring a bidder in accordance with Sections *sixty-five, sixty-six* and *sixty-seven* of the Public Procurement Act of 2008 and regulations 162 to 167 of the Public Procurement Regulations of 2011: (i) to be awarded a Government-financed contract; and (ii) to be a nominated[b] sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Government-financed contract. A bidder or supplier aggrieved by such a decision, may appeal in accordance with Section *sixty-nine* of the Public Procurement Act of 2008.

In further pursuance of this policy, Bidders shall permit the Government to inspect any accounts and records and other documents relating to the Bid submission and contract performance, and to have them audited by auditors appointed by the Government.

Furthermore, bidders shall be aware of the provision stated in GCC Sub-Clauses 22.2 and 56.2 (h).

Eligible Bidders A Bidder may be a natural person, private entity, or government-owned entity—subject to ITB 4.6—or any combination of them in the

[b] A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding document) is one which either has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that are accounted for in the evaluation of the bidder's pre-qualification application or the bid; or (ii) appointed by the Borrower.

form of a joint venture, under an existing agreement, or with the intent to constitute a legally-enforceable joint venture. Unless otherwise **stated in the BDS**, all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms.

A Bidder, and all parties constituting the Bidder, shall have the nationality of an eligible country, in accordance with Section 5 (Eligible Countries). A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, or incorporated, 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.

A Bidder shall not have a conflict of interest. All Bidders found to have a 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 :

they have a controlling partner in common; or

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

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

they have a relationship with each other directly 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

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 the party is involved. However, this does not limit the inclusion of the same subcontractor in more than one bid; or

a Bidder participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or

a Bidder has been hired (or is proposed to be hired) by the Employer as Engineer for the contract.

A Bidder that has been sanctioned by ZPPA in accordance with the above ITB 3.1 (d), shall be ineligible to be awarded a Government-financed contract, or benefit from a Government-financed

contract, financially or otherwise, during such period of time as the ZPPA shall determine

A statutory corporation or body or company in which Government has a majority or controlling interest shall be eligible only if they meet the provisions of Section 34 of the Public Procurement Act of 2008. To establish eligibility, the government-owned enterprise or institution should provide all relevant documents (including its charter) sufficient to demonstrate that it meets the provisions of Section 34(2) of the Public Procurement Act of 2008.

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

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

Firms shall be excluded if:

as a matter of law or official regulation, the Government prohibits commercial relations with that country, provided that Cooperating Partners involved are satisfied that such exclusion does not preclude effective competition for the supply of goods or related services required; or

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, Government prohibits any import of goods or contracting of works or services from that country or any payments to persons or entities in that country.

Eligible Materials, Equipment and Services

The materials, equipment and services to be supplied under the Contract shall have their origin in eligible source countries as defined in ITB 4.2 above and all expenditures under the Contract will be limited to such materials, equipment, and services. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.

For purposes of ITB 5.1 above, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that differs substantially in its basic characteristics or in purpose or utility from its components.

Contents of Bidding Document

Sections of Bidding Document

The Bidding Document consist 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 Requirements
Section VI - Works Requirements

PART 3 Conditions of Contract and Contract Forms
Section VII - General Conditions (GC)
Section VIII - Particular Conditions (PC)
Section IX - Contract Forms

The Invitation for Bids issued by the Employer is not part of the Bidding Document.

The Employer is not responsible for the completeness of the Bidding Document and their Addenda, if they were not obtained directly from the source stated by the Employer in the Invitation for Bids.

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.

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

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 inquiries during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of bids, within a period **given in the BDS**. The Employer shall forward copies of its response 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.

The Bidder is encouraged to visit and examine the Site of Works and its surroundings and obtain for itself, on its own risk and

responsibility, all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

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.

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.

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.

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

Amendment of Bidding Document

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

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.

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

Preparation of Bids

Cost of Bidding

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

Language of Bid

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

Documents Comprising the Bid

The Bid shall comprise the following:

(a) Letter of Bid;

(b) completed Schedules, in accordance with ITB 12 and 14, or **as stipulated in the BDS**;

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

(d) alternative bids, at Bidder's option and 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 in accordance with ITB 17 establishing the Bidder's qualifications to perform the contract;

(g) Technical Proposal in accordance with ITB 16;

(h) In the case of a bid submitted by a joint venture (JV), the JV agreement, or letter of intent to enter into a JV including a draft agreement, indicating at least the parts of the Works to be executed by the respective partners; and

(i) Any other document **required in the BDS**.

Letter of Bid and Schedules

The Letter of Bid, Schedules, and all documents listed under Clause 11, shall be prepared using the relevant forms in Section IV (Bidding Forms), if so provided. The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

Alternative Bids

Unless otherwise **indicated in the BDS**, alternative bids shall not be considered.

When alternative times for completion are explicitly invited, a statement to that effect will be **included in the BDS**, as will the method of evaluating different times for completion.

When **specified in the BDS** pursuant to ITB 13.1, and subject to ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the Bidding Document must first price the Employer's design 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 best-evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.

When **specified in the BDS**, Bidders are permitted to submit alternative technical solutions for specified parts of the Works. Such parts will be **identified in the BDS** and described in Section VI (Employer's Requirements). The method for their evaluation will be stipulated in Section III (Evaluation and Qualification Criteria).

Bid Prices and Discounts

The prices and discounts quoted by the Bidder in the Letter of Bid and in the Schedules shall conform to the requirements specified below.

The Bidder shall submit a bid for the whole of the works described in ITB 1.1 by filling in prices for all items of the Works, as identified in Section IV, Bidding Forms. In case of admeasurement contracts, the Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.

The price to be quoted in the Letter of Bid shall be the total price of the Bid, excluding any discounts offered.

Unconditional discounts, if any, and the methodology for their application shall be quoted in the Letter of Bid, in accordance with ITB 12.1.

If so indicated in ITB 1.1, bids are invited for individual contracts or for any combination of contracts (packages). Bidders wishing to offer any price reduction for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Price reductions or discounts shall be submitted in accordance with ITB 14.3, provided the bids for all contracts are submitted and opened at the same time.

Unless otherwise **provided in the BDS** and the Conditions of Contract, the prices quoted by the Bidder shall be fixed. If the prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, the Bidder shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data in Section IV (Bidding Forms) and the Employer may require the Bidder to justify its proposed indices and weightings.

All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total bid price submitted by the Bidder.

Currencies of Bid and Payment

The currency(ies) of the bid shall be as **specified in the BDS**.

Bidders may be required by the Employer to justify, to the Employer's satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the prices shown in the appropriate form(s) of Section IV, in which case a detailed breakdown of the foreign currency requirements shall be provided by Bidders.

Documents Comprising the Technical Proposal

The Bidder shall furnish a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section *IV* (Bidding Forms), in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work requirements and the completion time.

Documents Establishing the Qualifications of the Bidder

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 in Section *IV* (Bidding Forms).

Domestic Bidders, individually or in joint ventures, applying for eligibility for a 7½-percent margin of domestic preference shall supply all information required to satisfy the criteria for eligibility as described in ITB 33.

Period of Validity of Bids

Bids shall remain valid for the period **specified in the BDS** after the bid submission deadline date prescribed by the Employer. A bid valid for a shorter period shall be rejected by the Employer as nonresponsive.

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, it shall also be extended for a corresponding 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.

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

Bid Security

Unless otherwise **specified in the BDS**, the Bidder shall furnish as part of its bid, in original form, either a Bid Securing Declaration or a bid security **as specified in the BDS**. In the case of a bid security, the amount shall be **as specified in the BDS**.

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

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

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

(b) an irrevocable letter of credit;

(c) a cashier's or certified check; or

(d) another security **indicated in the BDS.**

from a reputable source from an eligible country. If the unconditional guarantee is issued by an insurance company or bonding company located outside the Employer's Country, it shall have a correspondent financial institution located in the Employer's Country. 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.

Any bid not accompanied by an enforceable and substantially compliant bid security or Bid Securing Declaration, if required in accordance with ITB 19.1, shall be rejected by the Employer as nonresponsive.

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 41.

If a bid security is specified pursuant to ITB 19.1, 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.

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 on the Letter of Bid, except as provided in ITB 18.2 or

(b) if the successful Bidder fails to:

(i) sign the Contract in accordance with ITB 40; or

(ii) furnish a performance security in accordance with ITB 41.

The Bid Security or the Bid Securing Declaration of a JV shall be in the name of the JV that submits the bid. If the JV has not been constituted into a legally-enforceable JV, 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 mentioned in ITB 4.1.

If a bid security is **not required in the BDS**, and

(a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid Form, except as provided in ITB 18.2, or

(b) if the successful Bidder fails to: sign the Contract in accordance with ITB 40; or furnish a performance security in accordance with ITB 41;

the Employer may**, if provided for in the BDS,** declare the Bidder disqualified to be awarded a contract by the Employer for a period of time **as stated in the BDS**.

Format and Signing of Bid

The Bidder shall prepare one original of the documents comprising the bid as described in ITB 11 and clearly mark it "ORIGINAL". Alternative bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE". In addition, the Bidder shall submit copies of the bid in the number **specified in the BDS,** and clearly mark each of them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

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.

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

Submission and Opening of Bids

Sealing and Marking of Bids

Bidders may always submit their bids by mail or by hand. When 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 each copy of the Bid, including alternative bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL", "ALTERNATIVE" and "COPY." These envelopes containing the original and the copies shall then be enclosed in one single envelope. The rest of the procedure shall be in accordance with ITB sub-Clauses 22.2 and 22.3.

(b) Bidders submitting bids electronically shall follow the electronic bid submission procedures **specified in the BDS**.

The inner and outer envelopes shall:

(a) bear the name and address of the Bidder;

(b) be addressed to the Employer as **provided in the BDS** pursuant to ITB 22.1;

(c) bear the specific identification of this bidding process indicated in accordance with ITB 1.1; and

(d) bear a warning not to open before the time and date for bid opening.

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

Deadline for Submission of Bids

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

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.

Late Bids

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.

Withdrawal, Substitution, and Modification of Bids

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 withdrawal 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.

Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.

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.

Bid Opening

The Employer shall open the bids in public at the address, date and time **specified in the BDS** in the presence of Bidders` designated representatives and anyone who choose to attend. 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**.

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 envelopes that are opened and read out at bid opening shall be considered further.

All other envelopes shall be opened one at a time, reading out: the name of the Bidder and the Bid Price(s), including any discounts and alternative bids and indicating whether there is a modification; the presence of a bid security or Bid securing Declaration, if required; and any other details as the Employer may consider appropriate. Only discounts and alternative offers 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.

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 contract if applicable, including any discounts and alternative offers; and the presence or absence of a bid security, if one was required. 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.

Evaluation and Comparison of Bids

Confidentiality

Information relating to the examination, evaluation, comparison, and postqualification of bids and recommendation of contract award, 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.

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

Notwithstanding ITB 25.2, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it may do so in writing.

Clarification of Bids

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. 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 31.

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.

Deviations, Reservations, and Omissions

During the evaluation of bids, the following definitions apply:

(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.

Determination of Responsiveness

The Employer's determination of a bid's responsiveness is to be based on the contents of the bid itself, as defined in ITB11.

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

(a) if accepted, would:

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

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

The Employer shall examine the technical aspects of the bid submitted in accordance with ITB 16, Technical Proposal, in particular, to confirm that all requirements of Section 6 (Employer's Requirements) have been met without any material deviation, reservation or omission.

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.

Nonconformities, Errors, and Omissions

Provided that a bid is substantially responsive, the Employer may waive any nonconformities in the bid.

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.

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 may be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component. The adjustment shall be made using the

methods indicated in Section III (Evaluation and Qualification Criteria).

Correction of Arithmetical Errors

Provided that the bid is substantially responsive, the Employer shall correct arithmetical errors on the following basis:

(a) only for unit price contracts, 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;

(b) 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

(c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

If the Bidder that submitted the best-evaluated bid does not accept the correction of errors, its bid shall be declared non-responsive.

Conversion to Single Currency

For evaluation and comparison purposes, the currency(ies) of the bid shall be converted into a single currency as **specified in the BDS**.

Margin of Preference

A margin of preference shall not apply, **unless otherwise specified in the BDS**.

Domestic bidders shall provide all evidence necessary to prove that they meet the following criteria to be eligible for a 7½ percent margin of preference in the comparison of their bids with those of bidders who do not qualify for the preference. They should:

(a) be registered within the country of the Employer's country ;

(b) have majority ownership by nationals of the country of the Employer's country ;

(c) not subcontract more than 10 percent of the Contract Price, excluding provisional sums, to foreign contractors.

33.3 The following procedure shall be used to apply the margin of preference:

(a) Responsive bids shall be classified into the following groups:

(i) Group A: bids offered by domestic bidders and joint ventures meeting the criteria of ITB Sub-Clause 33.2; and

(ii) Group B: all other bids.

(b) For the purpose of further evaluation and comparison of bids only, an amount equal to 7½ percent of the evaluated Bid prices determined in accordance with ITB Sub-Clause 33.2 shall be added to all bids classified in Group B.

Evaluation of Bids

The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.

To evaluate a bid, the Employer shall consider the following:

(a) the bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities for admeasurement contracts or Schedule of Prices for lump sum contracts, but including Daywork items, where priced competitively;

(b) price adjustment for correction of arithmetic errors in accordance with ITB 31.1;

(c) price adjustment due to discounts offered in accordance with ITB 14.3;

(d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 32;

(e) adjustment for nonconformities in accordance with ITB 30.3;

(f) application of all the evaluation factors indicated in Section III (Evaluation and Qualification Criteria);

The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.

If this Bidding Document allows Bidders to quote separate prices for different contracts, and to award multiple contracts to a single Bidder, the methodology to determine the best-evaluated price of the contract combinations, including any discounts offered in the Letter of Bid, is specified in Section III (Evaluation and Qualification Criteria).

If the bid for an admeasurement contract, which results in the best-evaluated Bid Price, is seriously unbalanced, front loaded or

substantially below updated estimates in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction 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.

Comparison of Bids The Employer shall compare all substantially responsive bids in accordance with ITB 34.2 to determine the best-evaluated bid.

Qualification of the Bidder The Employer shall determine to its satisfaction whether the Bidder that is selected as having submitted the best-evaluated and substantially responsive bid meets the qualifying criteria specified in Section III (Evaluation and Qualification Criteria).

The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17.1.

An affirmative determination of qualification 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 best-evaluated bid to make a similar determination of that Bidder's qualifications to perform satisfactorily.

Employer**'s Right to Accept Any Bid, and to Reject Any or All Bids** 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.

Award of Contract

Award Criteria Subject to ITB 37.1, the Employer shall award the Contract to the Bidder whose offer has been determined to be the best-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.

Notification of Award Prior to the expiration of the period of bid validity, the Employer shall notify the successful Bidder, in writing, via the Letter of

Acceptance included in the Contract Forms, that its bid has been accepted. 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 in the dgMarket 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.

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

The Employer shall promptly respond in writing to any unsuccessful Bidder who, after notification of award in accordance with ITB 39.1, requests in writing the grounds on which its bid was not selected.

Signing of Contract

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

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

Performance Security

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 34.5, 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.

Failure of the successful Bidder to submit the above-mentioned Performance Security or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security. In that event the Employer may award the Contract to the next best-evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.

The above provision shall also apply to the furnishing of a domestic preference security if so required.

Adjudicator

The Employer proposes the person **named in the BDS** to be appointed as Adjudicator under the Contract, at the hourly fee **specified in the BDS**, plus reimbursable expenses. If the Bidder disagrees with this proposal, the Bidder should so state in his Bid. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority designated in the Particular Conditions of Contract (PCC) pursuant to Clause 23.1 of the General Conditions of Contract (GCC), to appoint the Adjudicator.

Section II - Bid Data Sheet (BDS)

A. Introduction

ITB 1.1	The Employer is: ***Zambia Institute of Chartered Accountant (ZICA)***
ITB 1.1	The name of the bidding process is: ***Open National Bidding*** The identification number of the bidding process is: ***ZICA/DFIA/TD/0009/2025*** The number and identification of lots comprising this bidding process is: ***Tender for the Supply, Delivery, Installation, and Commissioning of a Hybrid Solar Backup Power Solution for ZICA Headquarters***
ITB 2.1	The Employer is: ***ZICA***
ITB 2.1	The name of the Project is: Supply***, Delivery, Installation, and Commissioning of a Hybrid Solar Backup Power Solution for ZICA Headquarters***
ITB 4.1(a)	The individuals or firms in a JV ***shall*** be jointly and severally liable.

B. Bidding Documents

ITB 7.1	For **clarification purposes** only, the Employer's address is: **The Chief Executive Officer** **Zambia Institute of Chartered Accountants** **Accountants Park** **2374/A Thabo Mbeki Road** **P.O Box 32005,** **Lusaka** **Zambia** **Tel: +260-211-374551-9** Requests for clarification should be received by the Employer no later than: ***7 day from the date of tender closing***
ITB 7.4	A Pre-Bid meeting ***shall*** take place. Date : 15th July 2025 Time: 10:00hrs

	The Chief Executive Officer **Zambia Institute of Chartered Accountants** **Accountants Park** **2374/A Thabo Mbeki Road** **Lusaka** **Zambia** A site visit conducted by the Employer shall be organized and shall take place on the same date, place and time as the pre-bid meeting.

C. Preparation of Bids

ITB 10.1	The language of the bid is: ***English***
ITB 11.1 (b)	The following schedules shall be submitted with the bid: ***I. Schedule of Prices*** II. ***Project Plan*** III. **Technical Proposal** IV. **Financial Proposal**
ITB 11.1 (i)	The Bidder shall submit with its bid the following additional documents: **1. Certificate of Incorporation/Registration** **2. 2024 PACRA Annual Return Form** **3. Particulars of shareholders from PACRA** **4. Valid 2025 Tax Clearance Certificate from ZRA;** **5. Valid 2025 NAPSA Compliance Certificate** **6. Valid Workers Compensation Fund Control Board Certificate** **7. VAT Registration Certificates** **8. Manufacturer's Authorization** **9. Verifiable certifications (IEC, UL or equivalent)** **10. Valid National Council for Construction Certificate - Category E or ME, Grade 4/5 or better.** **11. Written Power of Attorney/letter of authorization of the signatory of the Bid to commit the Bidder. The full names and specimen signature of the appointed person committing the bid must be provided. The full names,**

	designations and signatures of the appointing authorities must be clearly indicated on the Power of Attorney. **12. Signed Bid Submission. Form signed by authorized representative named in Power of Attorney in accordance with Sample Form in SBD** **13. Signed Bid Securing Declaration form for five (5No.) years as per sample provided.** **14. Signed Bid Validity Form for 90 Days** **15. Information regarding litigation status should be from bidders' Advocate(s) A written statement by the bidder himself or any other person shall not be accepted.** **16. Bidders shall mandatorily provide a detailed list of non-performing contracts including reasons for non-performance. Attempts to conceal information shall lead to disqualification. In case of such omission the Institute shall reject such bid, without thereby incurring any liability to the Bidder. In case of such an annulment, the bid submitted and specifically, bid securities, shall be promptly returned to the Bidder.** **17. The bidder must have a minimum of five (5) years' experience in the solar energy sector, with a proven track record in delivering projects of similar complexity. Experience in commercial or industrial photovoltaic (PV) installations of at least 100 kW is mandatory. Additionally, demonstrated experience in the design and implementation of battery-integrated systems (off-grid or hybrid), including large UPS or solar backup systems, is required. The bidder must submit a project portfolio or list of at least three (3) similar completed projects, including client references. Preference will be given to projects undertaken in Zambia or the sub-Saharan Africa region, particularly those involving grid-interactive battery systems. The submission must include three (3) signed recommendation letters from clients, clearly stating the scope of work undertaken and providing full contact details for verification.** **18. Personnel. The Bidder must demonstrate that it will have the personnel for the key positions that meet the following requirements:**

No.	Position	Qualifications	General Experience	Specific Experience
1.	Project Manager x 1	Bachelor's Degree in Electrical or Mechanical Engineering with a valid EIZ practicing license. The proposed specialist shall have at least 10 Years of working experience with at least 5 years' experience in design and installation of Solar PV systems	10 years	5 years
2.	Site Engineer x 1	Bachelor's Degree in Electrical or Mechanical Engineering with a valid EIZ practicing license. The proposed specialist shall have at least 5 Years of working experience with at least 3 years' experience in design and installation of Solar PV systems	5 years	3 years
3.	Civil/ Structural Engineer x 1	Bachelor's Degree in Civil Engineering with a valid EIZ practicing license	5 years	N/A
4	Quantity Surveyor	Bachelor's Degree in Quantity Surveying/ Building Science with a valid practicing license	5 years	3 years
4.	Project Technicians x 2	Diploma/Craft Certificate in Electrical or Mechanical Engineering with a valid EIZ practicing license. The proposed specialist shall have at least 5 Years of working experience with at least 3 years' experience in design and installation of Solar PV systems	5 years	3 years
5	Electrical Foreman/Technologist	Diploma in Electrical or Mechanical Engineering with a valid EIZ practicing license. The proposed specialist shall have at least 5 Years of working experience with at least 3 years' experience in design and	5 years	3 years

	<table><tr><td></td><td></td><td>installation of Solar PV systems</td><td></td><td></td></tr></table> ***Failure to furnish all information and documents required by the bidding documents or to submit a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in the rejection of its bid***
ITB 13.1	Alternative bids ***shall not be*** permitted.
ITB 13.2	Alternative times for completion ***shall not be*** permitted.
ITB 13.4	Alternative technical solutions shall be permitted for the following parts of the Works: Remote Monitoring Systems/Energy Management Solutions If alternative technical solutions are permitted, the evaluation method will be as specified in Section III (Evaluation and Qualification Criteria).
ITB 14.6	The prices quoted by the Bidder ***shall not be*** subject to adjustment during the performance of the Contract.
ITB 15.1	The prices shall be quoted by the bidder in: ***Zambian Kwacha***
ITB 18.1	The bid validity period shall be: ***90*** days.
ITB 19.1	The Bidder shall furnish a Bid Securing Declaration.
ITB 19.3 (d)	***N/A***
ITB 20.1	In addition to the original of the bid, the number of copies is: **Four (4). One (1) Original and three (3) Copies**
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 JV 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 JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution.

D. Submission and Opening of Bids

ITB 21.1	Bidders ***shall not*** have the option of submitting their bids electronically.
ITB 21.1 (b)	If bidders shall have the option of submitting their bids electronically, the electronic bidding submission procedures shall be: ***N/A***
ITB 22.1	For **bid submission purposes** only, the Employer's address is: Attention: PROCUREMENT OFFICE **Zambia Institute of Chartered Accountants** **Accountants Park** **2374/A Thabo Mbeki Road** **Lusaka** **Zambia** **The deadline for bid submission is:** Date: **15th August 2025** Time: **10:00hrs local time**
ITB 25.1	The bid opening shall take place at: **Zambia Institute of Chartered Accountants** **Accountants Park** **2374/A Thabo Mbeki Road** **Lusaka** **Zambia** **The deadline for bid submission is:** Date: **15th August 2025** Time: **10:00hrs local time**
ITB 25.1	If electronic bid submission is permitted in accordance with ITB 21.1, the specific bid opening procedures shall be: ***N/A***

E. Evaluation and Comparison of Bids

ITB 32.1	**Not applicable.**

ITB 33.1	*A margin of preference **shall not** apply.*
ITB 42.1	The Adjudicator proposed by the Employer is ***the Institute of Arbitrators***

Section III - Evaluation and Qualification Criteria

This section contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders if the bidding was not preceded by a prequalification exercise and postqualification is applied. In accordance with ITB 34 and ITB 36, no other methods, criteria and factors shall be used. The Bidder shall provide all the information requested in the forms included in Section 4 (Bidding Forms).

Table of Criteria

1. Evaluation

In addition to the criteria listed in ITB 34.1 (a) – (e) the following criteria shall apply:

1.1 Adequacy of Technical Proposal

Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section VI (Employer's Requirements).

1.2 Multiple Contracts

Pursuant to Sub-Clause 34.4 of the Instructions to Bidders, if Works are grouped in multiple contracts, evaluation will be as follows:

1.3 Completion Time

An alternative Completion Time, if permitted under ITB 13.2, will be evaluated as follows:

1.4 Technical Alternatives

Technical alternatives, if permitted under ITB 13.4, will be evaluated as follows:

2. Qualification

Factor	2.1 Eligibility					
Sub-Factor	Criteria					Documentation Required
	Requirement	Bidder				
		Single Entity	Joint Venture, Consortium or Association			
			All partners combined	Each partner	At least one partner	
2.1.1 Nationality	Nationality in accordance with ITB 4.2.	Must meet requirement	Existing or intended JV must meet requirement	Must meet requirement	N / A	Form ELI –1.1 and 1.2, with attachments
2.1.2 Conflict of Interest	No- conflicts of interests as described in ITB 4.3.	Must meet requirement	Existing or intended JV must meet requirement	Must meet requirement	N / A	Letter of Bid
2.1.3 Ineligibility	Not having been declared ineligible by ZPPA as described in ITB 4.4.	Must meet requirement	Existing JV must meet requirement	Must meet requirement	N / A	Letter of Bid
2.1.4 Government Owned Entity	Compliance with conditions of ITB 4.5	Must meet requirement	Must meet requirement	Must meet requirement	N / A	Form ELI –1.1 and 1.2, with attachments
2.1.5 Ineligibility based on a United Nations resolution or Zambian law	Not having been excluded as a result of the laws of Zambia or official regulations, or by an act of compliance with UN Security Council resolution, in accordance with ITB 4.8	Must meet requirement	Existing JV must meet requirement	Must meet requirement	N / A	Letter of Bidt

Factor	2.2 Historical Contract Non-Performance					
Sub-Factor	Criteria					Documentation Required
	Requirement	Bidder				
		Single Entity	Joint Venture, Consortium or Association			
			All partners combined	Each partner	At least one partner	
2.2.1 History of non-performing contracts	Non-performance of a contract did not occur within the last _____ (_) years prior to the deadline for application 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.	Must meet requirement by itself or as partner to past or existing JV	N / A	Must meet requirement by itself or as partner to past or existing JV	N / A	Form CON - 2
2.2.2 Pending Litigation	All pending litigation shall in total not represent more than _____ percent (_____%) of the Bidder's net worth and shall be treated as resolved against the Bidder.	Must meet requirement by itself or as partner to past or existing JV	N / A	Must meet requirement by itself or as partner to past or existing JV	N / A	Form CON – 2

Factor	2.3 Financial Situation					
Sub-Factor	Criteria					Documentation Required
	Requirement	Bidder				
		Single Entity	Joint Venture, Consortium or Association			
			All partners combined	Each partner	At least one partner	
2.3.1 Historical Financial Performance	Submission of audited balance sheets or if not required by the law of the bidder's country, other financial statements acceptable to the Employer, for the last ____ [ ] years to demonstrate the current soundness of the bidders financial position and its prospective long term profitability. (criterion 1) (criterion 2) _____	Must meet requirement	N / A	Must meet requirement	N / A	Form FIN – 3.1 with attachments
2.3.2. Average Annual Turnover	Minimum average annual turnover of _____, calculated as total certified payments received for contracts in progress or completed, within the last_____( ) years	Must meet requirement	Must meet requirement	Must meet _____ percent (_____%) of the requirement	Must meet _____ percent (_____%) of the requirement	Form FIN –3.2

Factor	2.3 Financial Situation					
Sub-Factor	Criteria					Documentation Required
	Requirement	Bidder				
		Single Entity	Joint Venture, Consortium or Association			
			All partners combined	Each partner	At least one partner	
2.3.3. Financial Resources	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 concurrent commitments.	Must meet requirement	Must meet requirement	Must meet _____ percent (_____%) of the requirement	Must meet _____ percent (_____%) of the requirement	Form FIN –3.3

Factor	***2.4 Experience***					
Sub-Factor	***Criteria***					***Documentation Required***
	Requirement	***Bidder***				
		Single Entity	***Joint Venture, Consortium or Association***			
			All partners combined	***Each partner***	***At least one partner***	
2.4.1 General Experience	Experience under contracts in the role of contractor, subcontractor, or management contractor for at least the last_____ [____] years prior to the applications submission deadline, and with activity in at least nine (9) months in each year.	Must meet requirement	N / A	Must meet requirement	N / A	Form EXP-4.1
2.4.2 Specific Experience	(a)Participation as contractor, management contractor, or subcontractor, in at least _____ (___) contracts within the last _____( ) years , each with a value of at least _____ (___), that have been successfully and substantially completed and that are similar to the proposed Works. The similarity shall be based on the physical size, complexity, methods/technology or other characteristics as described in Section VI, Employer's Requirements.	Must meet requirement	Must meet requirements for all characteristics	N / A	Must meet requirement for one characteristic	Form EXP 2.4.2(a)

Factor	***2.4 Experience***					
Sub-Factor	***Criteria***					***Documentation Required***
	Requirement	***Bidder***				
		Single Entity	***Joint Venture, Consortium or Association***			
			All partners combined	***Each partner***	***At least one partner***	
2.4.2 Specific Experience	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: …..	Must meet requirements	Must meet requirements	N / A	Must meet requirements	Form EXP-2.4.2(b)

2.5 Personnel

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

No.	Position	Qualifications	General Experience	Specific Experience
1.	Project Manager x 1	Bachelor's Degree in Electrical or Mechanical Engineering with a valid EIZ practicing license. The proposed specialist shall have at least 10 Years of working experience with at least 5 years' experience in design and installation of Solar PV systems	10 years	5 years
2.	Site Engineer x 1	Bachelor's Degree in Electrical or Mechanical Engineering with a valid EIZ practicing license. The proposed specialist shall have at least 5 Years of working experience with at least 3 years' experience in design and installation of Solar PV systems	5 years	3 years
3.	Civil/ Structural Engineer x 1	Bachelor's Degree in Civil Engineering with a valid EIZ practicing license	5 years	N/A
4	Quantity Surveyor	Bachelor's Degree in Quantity Surveying/ Building Science with a valid practicing license	5 years	3 years
4.	Project Technicians x 2	Diploma/Craft Certificate in Electrical or Mechanical Engineering with a valid EIZ practicing license. The proposed specialist shall have at least 5 Years of working experience with at least 3 years' experience in design and installation of Solar PV systems	5 years	3 years
5	Electrical Foreman/Technologist	Diploma in Electrical or Mechanical Engineering with a valid EIZ practicing license. The proposed specialist shall have at least 5 Years of working experience with at least 3 years' experience in design and installation of Solar PV systems	5 years	3 years

The Bidder shall provide details of the proposed personnel and their experience records in the relevant Forms 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:

No.	Equipment Type and Characteristics	Minimum Number required
1	Full PPE	
2	All Solar related kits	
3		
4		
5		

The Bidder shall provide further details of proposed items of equipment using the relevant Form in Section IV.

Section IV - Bidding Forms

Table of Forms

Letter of Bid

The Bidder must prepare the Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and address.

Note: All italicized text is for use in preparing these form and shall be deleted from the final products.

Date: _____
Bidding No.: _____
Invitation for Bid No.: _____

To:

We, the undersigned, declare that:

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

(b) We offer to execute in conformity with the Bidding Documents the following Works: _____;

(c) The total price of our Bid, excluding any discounts offered in item (d) below is: _____;

(d) The discounts offered and the methodology for their application are: _____;

(e) Our bid shall be valid for a period of _____ *[insert validity period as specified in ITB 18.1.]* days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

(f) If price adjustment provisions apply, the Table(s) of Adjustment Data shall be considered part of this Bid;[6]

(g) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Document;

(h) Our firm, including any subcontractors or suppliers for any part of the Contract, have nationalities from eligible countries;

---

[6] *Include if price adjustment provisions apply in the Contract in accordance with PCC Sub-Clause **13.8 Adjustments for Changes in Cost**.*

(i) We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 4.3;

(j) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 4.3, other than alternative offers submitted in accordance with ITB 13;

(k) Our firm, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, has not been declared ineligible by ZPPA or by an act of compliance with a decision of the United Nations Security Council;

(l) We are not a government owned entity / We are a government owned entity but meet the requirements of ITB 4.5;[7]

(m) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: [8]

Name of Recipient	Address	Reason	Amount

(n) 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;

(o) We understand that you are not bound to accept the best-evaluated bid or any other bid that you may receive; and

(p) If awarded the contract, the person named below shall act as Contractor's Representative: _____

Name: .....

In the capacity of: .....

Signed: .....

Duly authorized to sign the Bid for and on behalf of: .....

Date: .....

[7] ***Use one of the two options as appropriate.***
[8] ***If none has been paid or is to be paid, indicate "none".***

Schedules

Bill of Quantities/ Schedules of Prices

Schedule of Payment Currencies

For .....*insert name of Section of the Works*

Separate tables may be required if the various sections of the Works (or of the Bill of Quantities) will have substantially different foreign and local currency requirements. The Employer should insert the names of each Section of the Works.

	A	**B**	**C**	**D**
Name of Payment Currency	**Amount of Currency**	**Rate of Exchange to Local Currency**	**Local Currency Equivalent C = A x B**	**Percentage of Net Bid Price (NBP) 100xC / NBP**
Local currency _____		**1.00**		
Foreign Currency #1 _____				
Foreign Currency #2 _____				
Foreign Currency #3 _____				
Net Bid Price				**100.00**
Provisional Sums Expressed in Local Currency		**1.00**		
BID PRICE				

Table(s) of Adjustment Data

Table A - Local Currency

Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Local Currency Amount	Bidder's Proposed Weighting
	Nonadjustable	—	—	—	A: ____ B: ____ C: ____ D: ____ E: ____
			Total		**1.00**

Table B - Foreign Currency
Name of Currency: _____

If the Bidder wishes to quote in more than one foreign currency, this table should be repeated for each foreign currency.

Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Currency in Type/Amount	Equivalent in FC1	Bidder's Proposed Weighting
	Nonadjustable	—	—	—		A: ____ B: ____ C: ____ D: ____ E: ____
				Total		**1.00**

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 _____ *[name of the Bidder]* (hereinafter called "the Bidder") 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 Bidder, 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 Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

(a) has withdrawn its Bid during the period of bid validity specified by the Bidder in the Form 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 ITB.

This guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copies of the contract signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; and (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy your notification to the Bidder of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of the Bidder's bid.

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, ICC Publication No. 458.

_____

[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]*[9] *[amount in words]*, 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 Form 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 Instructions to Bidders;

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__.

Principal: _____	Surety: _____ Corporate Seal (where appropriate)
_____ *(Signature)*	_____ *(Signature)*
(Printed name and title)	*(Printed name and title)*

[9] 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.

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 Government for the period of time of *[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 Letter 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, the Bid-Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid.]

Technical Proposal

Technical Proposal Forms

Personnel

Equipment

Site Organization

Method Statement

Mobilization Schedule

Construction Schedule

Others

Forms for Personnel

Form PER – 1: Proposed Personnel

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

1.	**Title of position**
	Name
2.	**Title of position**
	Name
3.	**Title of position**
	Name
4.	**Title of position**
	Name
5.	**Title of position**
	Name
6.	**Title of position**
	Name
etc.	**Title of position**
	Name

Form PER – 2: Resume of Proposed Personnel

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

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

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

From*	To*	Company, Project , Position, and Relevant Technical and Management Experience*

Forms for Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key 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. The Bidder shall provide all the information requested below, to the extent possible. Fields with asterisk (*) shall be used for evaluation.

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

The following information shall be provided only for equipment not owned by the Bidder.

Owner	**Name of owner**	
	Address of owner	
	Telephone	**Contact name and title**
	Fax	**Telex**
Agreements	**Details of rental / lease / manufacture agreements specific to the project**	

Bidder's Qualification

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

Form ELI 1.1

Bidder Information Sheet

Date: _____
Bidding No.: _____
Invitation for Bid No.: _____
Page _____ of _____ pages

1. Bidder's Legal Name
2. In case of JV, 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 Sub-Clauses 4.1 and 4.2. ☐ In case of JV, letter of intent to form JV including a draft agreement, or JV agreement, in accordance with ITB Sub-Clauses 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 Sub-Clause 4.5.

Form ELI 1.2

Party to JV Information Sheet

Date: _____
Bidding No.: _____
Invitation for Bid No.:_____
Page _____ of_ _____ pages

1. Bidder's Legal Name:
2. JV's Party legal name:
3. JV's Party Country of Registration:
4. JV's Party Year of Registration:
5. JV's Party Legal Address in Country of Registration:
6. JV's Party 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 Sub-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 Sub-Clause 4.5.

Form CON – 2

Historical Contract Non-Performance

Bidder's Legal Name: _____ Date: _____
JV Partner Legal Name: _____ _____
Bidding No.: _____
Page _____ of _____ pages

Non-Performing Contracts in accordance with (Evaluation and Qualification 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).			
Year	Outcome as Percent of Total Assets	Contract Identification	Total Contract Amount (current value, US$ equivalent)
_____	_____	Contract Identification: Name of Employer: Address of Employer: Matter in dispute:	_____
Pending Litigation, in accordance with Section III (Evaluation and Qualification Criteria)			
☐ No pending litigation in accordance with Sub-Factor 2.2.2 of Section III(Evaluation and Qualification Criteria) ☐ Pending litigation in accordance with Sub-Factor 2.2.2 of Section III(Evaluation and Qualification Criteria), as indicated below			
Year	Outcome as Percent of Total Assets	Contract Identification	Total Contract Amount (current value, US$ equivalent)
_____	_____	Contract Identification: Name of Employer: Address of Employer: Matter in dispute:	_____
_____	_____	Contract Identification: Name of Employer: Address of Employer: Matter in dispute:	_____

Form CCC

Current Contract Commitments / Works in Progress

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

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

Financial Situation

Historical Financial Performance

Bidder's Legal Name: _____ Date: _____
JV Partner Legal Name: _____ Bidding No.: _____
Page _____ of _____ pages

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

Financial information in US$ equivalent	Historic information for previous _____ (__) years (US$ equivalent in 000s)						
	Year 1	Year 2	Year 3	Year …	Year n	Avg.	Avg. Ratio
Information from Balance Sheet							
Total Assets (TA)							
Total Liabilities (TL)							
Net Worth (NW)							
Current Assets (CA)							
Current Liabilities (CL)							
Information from Income Statement							
Total Revenue (TR)							
Profits Before Taxes (PBT)							

☐ 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:

- Must reflect the financial situation of the Bidder or partner to a JV, and not sister or parent companies
- Historic financial statements must be audited by a certified accountant
- Historic financial statements must be complete, including all notes to the financial statements
- Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted)

Form FIN – 3.2

Average Annual Turnover

Bidder's Legal Name: _____ Date: _____
JV Partner Legal Name: _____ Bidding *No*.: _____
Page _____ of _____ pages

Annual turnover data (construction only)		
Year	Amount and Currency	US$ equivalent
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
*Average Annual Construction Turnover	_____	_____

*Average annual turnover calculated as total certified payments received for work in progress or completed over the number of years specified in Section III (Evaluation and Qualification Criteria), Sub-Factor 2.3.2, divided by that same number of years.

Form FIN3.3

Financial Resources

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

Source of financing	Amount (US$ equivalent)
1.	
2.	
3.	
4.	

Experience

General Experience

Bidder's Legal Name: ______________________________ Date: ______________________

JV Partner Legal Name: ____________________________ Bidding No.: _________________

Page _______ of _______ pages

Starting Month / Year	Ending Month / Year	Years*	Contract Identification	Role of Bidder
______	______		Contract name: Brief Description of the Works performed by the Bidder: Name of Employer: Address:	_________
______	______		Contract name: Brief Description of the Works performed by the Bidder: Name of Employer: Address:	_________
______	______		Contract name: Brief Description of the Works performed by the Bidder: Name of Employer: Address:	_________
______	______		Contract name: Brief Description of the Works performed by the Bidder: Name of Employer: Address:	_________
______	______		Contract name: Brief Description of the Works performed by the Bidder: Name of Employer: Address:	_________
______	______		Contract name: Brief Description of the Works performed by the Bidder: Name of Employer: Address:	_________

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

Form EXP – 2.4.2(a)

Specific Experience

Bidder's Legal Name: _____ Date: _____
JV Partner Legal Name: _____ Bidding No.: _____

Page _____ of _____ pages

Similar Contract Number: ___ *[insert specific number]* of ___*[insert total number of contracts* required.	**Information**		
Contract Identification	_____		
Award date Completion date	_____ _____		
Role in Contract	☐ Contractor	☐ Management Contractor	☐ Subcontractor
Total contract amount	_____		US$_____
If partner in a JV or subcontractor, specify participation of total contract amount	_____%	_____	US$_____
Employer's Name:	_____		
Address: Telephone/fax number: E-mail:	_____ _____ _____ _____		

Form EXP – 2.4.2(a) (cont.)

Specific Experience (cont.)

Bidder's Legal Name: _____ Page _____ of _____ pages
JV Partner Legal Name: _____

Similar Contract No. __*[insert specific number]* of ___*[insert total number of contracts]* required	**Information**
Description of the similarity in accordance with Sub-Factor 2.4.2a) of Section III (Evaluation and Qualification Criteria):	
Amount	_____
Physical size	_____
Complexity	_____
Methods/Technology	_____
Physical Production Rate	_____

Form EXP – 2.4.2(b)

Specific Experience in Key Activities

Bidder's Legal Name: _____ Date: _____
JV Partner Legal Name: _____ Bidding No.: _____
Subcontractor's Legal Name: _____ Page _____ of _____ pages

	Information		
Contract Identification	_____		
Award date Completion date	_____ _____		
Role in Contract	☐ Contractor	☐ Management Contractor	☐ Subcontractor
Total contract amount	_____		US$_____
If partner in a JV or subcontractor, specify participation of total contract amount	_____%	_____	US$_____
Employer's Name:	_____		
Address: Telephone/fax number: E-mail:	_____ _____ _____ _____		

Form EXP – 2.4.2 (b)(cont.)

Specific Experience in Key Activities (cont.)

Bidder's Legal Name: _____ Page _____ of _____ pages
JV Partner Legal Name: _____
Subcontractor's Legal Name: _____

	Information
Description of the key activities in accordance with Sub-Factor 2.4.2b) of Section III (Evaluation and Qualification Criteria):	

Section V - Eligible Countries

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

1. In accordance with Section 61 of the Public Procurement Act No. 12 of 2008 and Clause 155 of the Public Procurement Regulations of 2011, the Government permits firms and individuals from all countries to offer goods, works and services for Government-financed projects. As an exception, firms of a Country or goods manufactured in a Country may be excluded if:

(i): as a matter of law or official regulation, Government prohibits commercial relations with that Country, provided that Cooperating Partners involved are satisfied that such exclusion does not preclude effective competition for the supply of the Goods or Works required, or

(ii): 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 Government prohibits any import of goods from that Country or any payments to persons or entities in that Country.

2. For the information of bidders, at the present time firms, goods and services from the following countries are excluded from this bidding:

_____
_____

_____
_____

PART 2 – Employer's Requirements

Section VI - Employer's Requirements

Table of Contents

Terms of Reference (TOR) – Solar Backup Power Solution for ZICA

1. Background and Objectives

The Zambia Institute of Chartered Accountants (ZICA) is seeking to install a solar photovoltaic (PV) backup power solution to ensure uninterrupted electricity supply at its facilities. Frequent grid outages and the need for reliable power to support critical operations have prompted this initiative. The objective of this project is to design, supply, deliver, install, and commission a solar PV system with battery storage that can sustain the full institutional load for at least 24 hours without grid power. This system will integrate with the existing ZESCO electrical grid and on-site diesel generator to provide seamless power continuity and energy cost savings.

Key Objectives:

- **Reliable Backup Power:** Provide a robust solar PV and battery backup system capable of powering ZICA's full load (approximately 285.9 kW) for 24 hours during grid outages.
- **Grid Integration:** Implement a hybrid system that works in tandem with the ZESCO grid and an existing standby generator, allowing automatic switchover and synchronized operation without power interruption.
- **Energy Efficiency and Cost Savings**: Leverage solar energy to offset grid electricity consumption during normal operation, thereby reducing energy costs, while maintaining readiness to supply backup power when needed.
- **Sustainability**: Utilize clean solar energy to decrease reliance on fossil fuels (diesel generator) and reduce the carbon footprint of ZICA's operations.
- **Safety and Standards Compliance**: Ensure the system is designed and installed to high quality and safety standards, in compliance with relevant International Electrotechnical Commission (IEC) standards, Zambian Regulations, and industry best practices.

2. Scope of Work

The scope of work for the contractor encompasses a turnkey solution from design through commissioning and handover. The selected contractor shall perform, at minimum, the following tasks:

- **Detailed System Design**: Analyze ZICA's load profile and site conditions to design an optimal solar PV and battery backup system. This includes sizing all components (PV array, inverters, batteries, etc.) to meet the specified load and autonomy requirements, and planning the integration with the grid and generator.
- **Equipment Supply**: Provide all equipment and materials for the solar backup solution. Major components include solar PV modules (~372 kW DC capacity), inverters/chargers, battery banks, mounting structures (roof and/or ground mount),

cabling, combiner boxes, protection devices, monitoring hardware, and any other balance-of-system components. All equipment must be new, of high quality, and compliant with the specifications in this TOR.

- **Delivery and Installation**: Deliver all equipment to the ZICA site and carry out complete installation. This includes PV module mounting on the available ground space, electrical wiring and conduit works, inverter and battery system installation, integration with the existing electrical infrastructure (main distribution board, grid connection, generator interface), and any necessary civil works (e.g. battery housing, cable trenching, support structures).
- **Construction of Solar Shade (Carport Structure):** Supply and install a **solar shade structure** designed to also function as a **carport**, constructed using high-strength steel. The structure shall be engineered to support the full load of the solar PV panels and withstand local wind and weather conditions. All **cabling** from the solar panels shall be securely routed **underground** to the designated **power room**, in compliance with relevant safety and electrical standards. The design must ensure durability, aesthetics, and ease of maintenance.
- **Rewiring and Electrical Upgrades**: Modify the facility's electrical distribution as needed to accommodate the new system. In particular, create dedicated circuits and breakers to separate critical loads (lighting and essential socket outlets) from non-essential loads, as required for effective backup power management. This may involve installing a sub-distribution board for critical loads and re-routing wiring so that during an outage only the designated circuits are powered by the solar-battery system. All such electrical works must adhere to local wiring regulations and good engineering practice.
- **Integration and Commissioning**: Integrate the solar-battery system with the ZESCO grid and the existing diesel generator. Implement an automatic control/transfer system so that: (a) when grid power is available, the system can operate in parallel (supplementing power and charging batteries) or in standby; (b) upon grid failure, the inverter(s) automatically disconnect from the grid and immediately supply power from solar/batteries to the facility's critical loads (island mode) and (c) coordinate with the generator such that if battery state-of-charge is low or a prolonged outage occurs, the generator can start and the system will synchronize to it to either recharge batteries or directly feed loads. After installation, perform full testing and commissioning of the system, demonstrating that all components operate as intended (including simulated power failure tests, load tests, and recovery).
- **Monitoring and Control Setup**: Install a remote monitoring system for the solar backup solution. The system should allow ZICA to monitor performance (solar generation, battery status, load supply, etc.) in real-time and receive alerts for any faults. There is no strict requirement on the platform or brand – the contractor should propose an affordable, user-friendly monitoring solution (e.g. integrated inverter manufacturer portal or third-party system) accessible via web and mobile. The monitoring should enable ZICA personnel to check key parameters like battery charge level, solar output, and load consumption, even remotely. If available, integration of the monitoring system with the existing facility management systems or sending periodic performance reports would be a plus.
- **Training and Handover**: Provide training to ZICA's facility management or technical staff on the operation and basic maintenance of the installed system. This includes

training on the monitoring system, safe operating procedures (e.g. how to safely isolate or shut down the system), and basic troubleshooting. The contractor shall also supply comprehensive documentation, including equipment manuals, as-built electrical drawings and single-line diagrams, and a detailed commissioning report.

- **Post-Installation Support**: During an initial defects liability period (12 months after commissioning), the contractor should offer support for any issues that arise. This includes honoring all warranties, responding to malfunctions, and performing any necessary corrective maintenance. Preventive maintenance schedules (panel cleaning, battery health checks, etc.) should be provided. The contractor shall be required to provide an extended maintenance service agreement (to be negotiated separately at contract award stage).

Note: All work must be carried out with minimal disruption to ZICA's ongoing operations. The contractor shall coordinate with ZICA to schedule any necessary power shutdowns (for cut-over, testing, etc.) during off-peak hours or weekends. The site must be kept safe and clean throughout the project, and all debris or waste must be removed after installation.

3. Site Information and Conditions

ZICA's facility offers a favorable environment for a solar installation, with ample space and accessible infrastructure. The key site details are as follows:

- **Location & Orientation**: The primary installation site is ZICA's facility (ground-mount area on the premises).The contractor should optimize panel placement for maximum solar exposure (e.g. considering tilt angle and azimuth).
- **Available Area**: There is over 1,000 square meters of combined usable area for the PV installation. This includes the building rooftop area (flat or pitched sections available) and additional ground space within the facility's compound that can be utilized for mounting solar panels if needed. The contractor should conduct a site survey to determine the ideal allocation of panels between roof and ground to achieve the required 372 kW capacity. Shade analyses should be performed to ensure there are no significant shadows from surrounding structures or trees that could impact generation. The structural integrity of the roof must be verified to support the weight and wind load of the solar panels; any structural enhancements or special mounting approaches (e.g. ballasted systems) should be included in the proposal.
- **Existing Electrical Infrastructure**: The facility is currently served by the ZESCO grid via a main distribution board. There is also an existing diesel backup generator (details to be provided on capacity and integration points) that supplies the facility during extended outages. The electrical system consists of multiple circuits for lighting, outlets (sockets), HVAC, and other equipment. However, some of these circuits may be combined in the existing setup. It is required to separate lighting circuits from socket (power outlet) circuits where practical, creating dedicated sub-circuits for critical loads. This will facilitate a more effective backup system by allowing the most essential loads (e.g. lights, critical IT equipment, etc.) to be prioritized. The site also has open ground area suitable for battery enclosures or an equipment room where inverters, batteries, and control panels can be housed securely. Ventilation and cooling for the

battery/inverter room should be considered if an indoor installation is used (especially for battery systems to ensure longevity).

- **Environmental Conditions**: Lusaka typically experiences high solar irradiance for most of the year, favorable for solar power generation. Ambient temperatures can range from ~10°C to 35°C over the year, and the system components should be rated to operate reliably in this climate (including high temperatures under sun and seasonal heavy rains). The installation should be designed to withstand local wind speeds and weather events – all mounting structures must be secure against wind uplift and corrosion (use of stainless steel or galvanized fittings, UV-resistant cable insulation, etc.). Lightning protection measures should be in place given that thunderstorms are common in the region. The contractor shall be required to install lightning arrestors or integrate the array into the building's lightning protection system, and surge protectors on electrical lines as detailed later.

4. Power Requirements and System Sizing

A core requirement of this TOR is that the solar backup solution fully supports ZICA's power needs for a 24-hour period without grid input. The following are the critical load and sizing parameters:

- **Facility Load**: The peak electrical load of the ZICA facility is approximately 285,942 W (about 286 kW). This represents the full load that the backup system should be capable of supplying. It encompasses all essential consumption in the building (lighting, computers, HVAC, appliances, etc.) under normal operating conditions. The system should be sized to handle this load continuously during an outage. It is expected that this figure is the maximum demand; actual consumption may fluctuate below this at times, but design should consider the worst case of full demand. If certain loads are deemed non-critical and can be shed during outages, the bidder may propose adjustments, but by default the design should assume the entire load is supported.
- **Solar PV Capacity**: To reliably supply the above load and recharge batteries, the PV array should be oversized by a margin. A total PV capacity of around 372 kW (DC) is required – this is approximately 30% above the peak load. The oversizing accounts for factors such as battery charging needs, solar irradiance variability, system losses, and to ensure sufficient energy generation even in sub-optimal conditions. Contractors should confirm this sizing with solar energy yield calculations for Lusaka conditions (using tools or irradiation data). The array size may be adjusted in the proposal if justified by calculations (e.g. considering average daily consumption vs. solar production), but must be sufficient to meet the 24h autonomy goal. All else equal, a larger PV array will improve system reliability by generating more energy during daylight.
- **Battery Storage Capacity**: The backup system must include a battery bank sized to provide 24 hours of autonomy at full load. At 285.9 kW consumption, a full 24-hour outage would require on the order of 6,860 kWh (6.86 MWh) of usable energy storage (285.9 kW × 24h). For design purposes, a minimum usable storage capacity of ~7,000 kWh is required. This accounts for some inefficiencies and ensures the battery is not completely drained at the 24h mark. The actual battery bank nominal capacity may

need to be higher depending on the allowable depth of-discharge (DoD) – for example, if designing for 80% DoD to prolong battery life, the installed capacity might be ~8,575 kWh to yield 6,860 kWh usable. Bidders should specify the proposed battery technology and configuration (e.g. lithium-ion phosphate (LiFePO) batteries are preferred for their long life, but high-quality sealed gel or AGM lead-acid could be considered with justification). The battery system must include a Battery Management System (BMS) for monitoring and safety and be capable of delivering the full load power (through the inverters) when called upon.

- **Inverter/Charger Capacity**: The inverter system (or multiple inverter units in parallel) must be rated to supply the facility's peak load and manage the PV and battery power flow. The inverter capacity should be at least 286 kW (AC) continuous output, with sufficient surge or overload capability to handle in-rush currents from equipment (for example air conditioners). In practice, the system may use multiple three-phase hybrid inverters configured together (e.g. several 50–100 kW units) to reach the required capacity and to improve redundancy. The inverters must be hybrid (bi-directional) type, meaning they can convert PV DC power to AC, charge the batteries from PV or grid (acting as a charger), and discharge the batteries to supply AC power when needed. They should have built-in automatic transfer functionality to island the system when the grid fails (anti-islanding protection per IEEE/ IEC standards) and reconnect when grid is back. Since the PV array (~372 kW) is larger than the peak load, the inverters should also be able to curtail export to the grid if necessary or make use of the excess PV power to charge batteries. The AC output should be three-phase, 400/415V AC nominal to match standard Zambian grid voltage (or 230V AC three-phase 50Hz – the system should match the facility's voltage levels). The inverter system must also synchronize with the generator output when the generator runs, or have an external automatic transfer switch arrangement – in either case, seamless transition is expected.
- **Energy Management Strategy**: Under normal conditions (grid healthy), the system should prioritize using solar power to supply the facility's daytime loads and charge the batteries. Excess solar (if any) can either be fed into the grid (through net metering) or limited by the inverter controls. During nighttime or insufficient sun, the grid supplies the loads and may also charge batteries if configured to do so. If the grid fails, the battery and solar will supply the loads. Should the battery state-of-charge run low during a prolonged outage (e.g. after many hours of no grid and low solar generation), the system should have logic to start the generator as a last resort backup to power loads and/or recharge batteries. This layered approach (solar battery generator) ensures maximum use of renewable energy while maintaining power availability. Bidders should describe in their proposal the control strategy and how their system will manage the power flows between sources (PV, battery, grid, generator) automatically.

5. Technical Specifications and Requirements

The system components and installation must meet the following technical specifications and quality standards. Bidders must adhere to these minimum requirements in their design and clearly state any deviations or enhancements in their proposals.

5.1 Solar PV Array

- Capacity: Approximately 372 kW (DC) total PV capacity, comprised of high-efficiency solar PV modules. The exact number of panels will depend on the wattage of the chosen panels (e.g. about 800 panels of 450 W each, or a different configuration with higher-wattage modules). The array size should be sufficient to generate the energy required to support the load and recharge batteries daily, as detailed in Section 4.
- **Solar Modules:** Panels shall be Tier-1 quality (proven reliable manufacturer) with crystalline silicon technology (monocrystalline preferred for higher efficiency). Each panel should have a minimum efficiency of ~18-20% and a rated power output in the range of 450 W to 600 W (typical for modern modules). The modules must carry an IEC 61215 certification (for design qualification) and IEC 61730 (for safety), or equivalent international standards. They should have a performance warranty of 25 years (guaranteeing e.g. ~80% of initial output at year 25) and a product workmanship warranty of at least 10 years. The vendor must provide documentation of the panel specifications and warranties. All panels must be PID-free and have quality testing certifications (TÜV, etc.).
- **Mounting Structure**: The panels will be ground mounted in the available area. The mounting structures must be engineered for durability and safety. The structure should set panels at an optimal tilt angle (if low-pitch, use tilt frames ideally facing north or near-north for best year-round production). For ground-mounted arrays, provide a galvanized steel mounting frame anchored in concrete footings, with panel tilt ideally facing due north at appropriate angle (~10-15° tilt for Zambia's latitude) for maximum yield. All structures must withstand wind speeds of up to 120 km/h (or as per local wind load standards) and have corrosion protection (aluminum or hot-dip galvanized steel components). The installation should also have accessibility for cleaning and maintenance – e.g., leave sufficient spacing between rows.
- **Combiner Boxes and DC Protections**: PV strings should be combined in properly rated DC combiner boxes with surge protection and fuses as needed. Each PV string or group of strings must have DC fuse or circuit breaker protection of appropriate rating. Provide DC isolator switches (load break disconnects) near the PV arrays and at the inverter inputs, to allow safe maintenance shutdown of PV supply. Include surge protective devices (SPD) on the DC side to guard against lightning-induced surges 7 . All outdoor combiner/junction boxes should be IP65 or higher rated for waterproofing and dust-proofing, UV resistant, and suitably labeled (including warning signs for DC voltage).
- **Wiring (DC Side):** Use solar PV specific cables (e.g. 4 mm^2 or 6 mm^2 PV cable) that are UV resistant and rated for outdoor use, with double insulation and appropriate temperature rating. Cable runs should be kept short where possible to minimize voltage drop; any long runs from a ground array to the inverters should use adequately sized cable to keep voltage drop < 2%. All DC cables must be securely routed (in conduit or cable trays where appropriate) and kept tidy. Negative and positive cables must be clearly distinguished (color coded or labeled) and properly terminated with MC4 (or equivalent) solar connectors or lugs as required. The system's maximum PV array voltage (open-circuit) and string configuration must be within the inverter's input

voltage window and comply with safety limits (typically <1000 V DC for IEC standards). Ensure a DC grounding scheme as recommended by the inverter manufacturer and standards – e.g. if using a transformerless inverter, typically the PV array may be ungrounded; if using a grounded system, follow NEC/IEC rules for single-point grounding and ground-fault protection devices.

5.2 Inverters and Power Control System

- **Type and Topology**: The inverters shall be Hybrid (Grid-Interactive) Inverter-Chargers capable of both grid-tied and off-grid operation. They should be able to feed the facility loads from PV and battery when grid is present (self-consumption mode) and seamlessly transition to off-grid mode using battery/PV during outages. The inverters must include an integral battery charger (to charge batteries from grid or generator when needed) and an Automatic Transfer Switch or internal relays to isolate from the grid on power failure. A multi-inverter setup is expected due to the high power rating; these inverters must be able to operate in parallel and share load. Three-phase output is required, so the solution could use either dedicated three phase inverters or multiple single-phase units configured for three-phase. The system should be configured such that phase balancing is maintained (no overloading one phase).
- **Capacity and Quantity**: Provide inverter capacity of at least 300 kW (AC) total to comfortably handle the 286 kW load (this could be, for example, 6 units of 50 kW each, or 3 units of 100 kW each, etc., depending on available product sizes). The continuous power rating should meet or exceed 286 kW, and overload/surge rating should handle short surges (e.g. 120% for a few seconds or as per inverter specs for motor start). The inverters must also support the PV array of ~372 kW; this may mean the combined PV inputs of the inverter system should accept 372 kW DC (some oversizing of PV to inverter AC rating is generally acceptable, e.g. 372 kW DC on 300 kW AC is 1.24 DC/AC ratio). Bidders should ensure the inverter solution proposed can either directly take the DC from the PV (common DC bus) or use separate PV input channels to accommodate the full array capacity. If multiple inverter units are used, the PV array can be subdivided among them.
- **Output and Grid Compliance**: The inverters must produce 50 Hz AC at 400/230V three-phase, matching ZESCO grid parameters. They should comply with grid interconnection standards, including anti-islanding protection (immediate disconnection upon grid failure to prevent backfeeding) and proper synchronization with the grid when reconnecting. Any harmonic distortion introduced must be within IEEE/IEC limits (THD < 5%). If ZESCO or Zambian grid code has specific requirements (such as anti-islanding trip times, or requirement of zero export unless approved), the inverter must meet those. The inverters should have integrated protection features: over/under voltage, over/under frequency, short-circuit, overload, and anti-islanding as noted. If required, external protective relays or a grid-interactive controller should be included to meet utility requirements (for example, a separate synchronizing relay and sync-check function may be needed for systems of this size to prevent out-of-phase connection – the bidder should include this if required by ZESCO grid code).

- **Battery Integration**: The inverter/charger must be compatible with the proposed battery type and voltage. Likely a high-voltage battery system will be used for efficiency (could be on the order of 400–800 V DC nominal battery bank for such large systems, or possibly lower voltage with multiple battery-inverter pairs). The contractor should specify the DC voltage of the battery bank and ensure the inverter can charge/discharge at appropriate rates. Charge control (either internal or via external charge controllers) should implement Battery Management System (BMS) signals to prevent overcharge or deep discharge, and to optimize battery life. The charge algorithm (e.g. 3-stage charging for lead-acid or CC/CV for lithium) must be suitable for the battery chemistry.
- **Generator/ATS Integration**: The system must include provisions to work with the existing diesel generator. Ideally, the hybrid inverters can synchronize with the generator's AC output similarly to how they do with the grid. This would allow the generator to kick in and support loads or charge batteries if both grid is down and batteries are low. If the inverters cannot sync directly, an Automatic Transfer Switch (ATS) or control panel should be installed to manage switching between the inverter supply and generator supply. The goal is a no-break transfer or minimal interruption when switching power sources. The generator should be able to start automatically based on battery state-of-charge or upon command from the system controller (the contractor to include an auto-start module for the generator if not already present). Likewise, when the grid returns, the system should smoothly reconnect and if the generator was running, shut it down after a cool-down period. All such controls and interlocks must be configured to avoid any unsafe backfeed – e.g., ensure the generator never energizes the grid and the solar inverters never feed into the generator unsynchronized. The proposal should clearly explain how generator integration will be achieved (either via the inverter's features or external controllers).
- **Efficiency and Performance**: The inverter(s) should have high efficiency (preferably >95% conversion efficiency at rated load). They should also have a low standby loss given that multiple units may be running continuously (i.e., when loads are low, the inverters shouldn't waste significant power). If multiple inverters are used, the system should allow scalable operation – for example, if load is light, some inverters can switch off or go to sleep to save self consumption. The operating temperature range of the inverters must cover the site conditions (with cooling fans or heat sinks to manage high temps; if installed outdoors, enclosures might be needed but indoor is preferable). Noise level of inverters (cooling fans, etc.) should be considered if near offices. All inverters should be properly earthed and installed according to manufacturer guidelines, with adequate clearances and ventilation.

5.3 Battery Energy Storage System

- **Battery Technology**: The battery bank will be a crucial component, providing energy during nights and cloudy periods. Lithium-ion batteries ($LiFePO_4$/LFP) are strongly recommended for this project due to their higher energy density, longer cycle life, and lower maintenance. Alternatively, industrial VRLA (gel/AGM) lead-acid batteries or even flow batteries could be proposed, but the bidder must justify their choice in terms of cost, performance, and longevity. The batteries can be provided as a single large

bank or modular banks connected together; containerized battery solutions are acceptable for ease of installation if available (e.g. a 1 MWh battery container, with multiple containers to meet 7 MWh requirement). All battery systems must include a Battery Management System (for lithium) or appropriate monitoring (for lead acid) to ensure health and safety.

- **Capacity and Autonomy**: As noted in Section 4, the system requires around 7,000 kWh usable capacity. Bidders should clearly state the nominal energy capacity of the proposed battery bank and the assumed Depth of Discharge. For example, a proposal might consist of 14 battery strings each of 600Ah @ 520V nominal, providing X kWh total, etc. or a lithium battery rack system with Y modules of certain kWh each. The design should ensure that after 24 hours of no grid (with presumably some solar input during the day), the battery is not 100% exhausted – some reserve (e.g. 10-20%) should ideally remain to avoid complete blackout and to extend battery life. The system should also be capable of recharging the entire battery bank with one day of good sunshine (i.e., PV generation in a typical day should equal or exceed the battery capacity plus load of that day). This may require managing the loads or generator support if solar alone is marginal on a very cloudy day.
- **Battery Voltage and Configuration**: The battery bank voltage and configuration must match the inverter requirements. Likely, a high-voltage battery system will be used (several hundred volts DC) to reduce current and improve efficiency. Bidders should specify the series/parallel configuration of cells or modules, and how many parallel strings (if any). If multiple parallel strings of batteries are used, proper current-sharing or separate battery breakers per string should be implemented to ensure safety and balance.
- **Cycle Life and Warranty**: The proposed battery should have a long cycle life to handle daily charging/discharging. For lithium batteries, a lifespan of >4,000 cycles at 80% DoD (or similar) is expected, which equates to roughly 10+ years of operation. Lead-acid options should be industrial grade with sufficient cycle life (though these typically yield ~1500 cycles at 50% DoD).

The warranty for the battery system should be at least 5 years (with a performance guarantee on capacity retention). Bidders must include the manufacturer's datasheets indicating the expected cycle life at various DoD and temperature conditions.

- **Battery Management and Safety**: The battery installation must incorporate all necessary safety and control equipment. This includes:
- **Battery Management System (BMS)**: for lithium batteries, to monitor cell voltages, temperatures, state-of-charge (SOC), and control charge/discharge to prevent out-of-range conditions. The BMS should communicate with the inverter/charger to coordinate charging.
- **Protection Devices**: Each battery string or module should have appropriate fuses or DC circuit breakers for over-current protection. Install a main DC disconnect switch for the battery bank to isolate it during maintenance. Include Surge Protection Devices on the battery/inverter DC link if not inherently protected. Ventilation or thermal management must be addressed – if leadacid, battery room ventilation for hydrogen gas is required; if lithium, ensure ambient temperature is kept within allowable range

(e.g. consider air conditioning for the battery room if extreme heat could degrade battery life). Provide fire safety measures as appropriate (fire extinguishers nearby rated for electrical/battery fires, possibly an automatic fire suppression system if the battery enclosure is enclosed and large – bidders to assess based on proposed technology).

- **Enclosure:** Batteries should be housed in a secure, weather-proof area. Options include a dedicated battery room, indoor ventilated cabinets, or outdoor battery container. The enclosure must prevent unauthorized access (lockable) and be labeled with warning signs (e.g. "Battery Bank – High Voltage – Authorized Personnel Only"). If outdoors, containers should be IP54 or better and shaded from direct sun to avoid overheating.
- **Monitoring**: Integrate battery monitoring into the overall system monitoring platform. Key parameters like state-of-charge, voltage, current, and temperature should be visible to operators. Set appropriate alarm thresholds (low SOC alert, over-temperature, etc.). Remote monitoring should also capture these if possible, to allow proactive maintenance (e.g. detecting if a battery string is underperforming).

5.4 Electrical Integration and Distribution

- **Main Distribution Integration**: The solar inverter output will tie into the facility's electrical distribution. The contractor must connect the system output downstream of the main grid incomer, typically at a sub-distribution board or after the main distribution panel via an ATS. It is crucial to design this point of interconnection such that when the system is in island mode (grid down), it only feeds the intended loads and not the grid. A critical loads sub-panel approach is advisable: i.e., separate the circuits that will be backed up (critical circuits) and have the inverter supply feed that sub-panel. The existing main panel and generator panel will then be interconnected via automatic changeover logic to either feed the critical panel from the inverter or directly from generator/grid as needed. The contractor should produce an electrical single-line diagram showing how the PV system, battery, inverters, main panel, generator, and loads are interlinked. This design must be reviewed and approved by a qualified electrical engineer and, if required, by ZESCO for compliance.
- **Rewiring for Separated Circuits**: As mentioned, the project includes rewiring certain circuits to create a clear separation between essential and non-essential loads. Presently, lighting and socket outlets might be on common circuits; the contractor will install new breakers and wiring modifications so that, for example, all essential lighting is on dedicated circuits, separate from heavier appliance or HVAC circuits. Similarly, critical office equipment or server room supplies could be isolated. The goal is twofold: (1) It allows shedding of non-critical loads during extended outages to conserve battery (if needed), and (2) it ensures the backup power is delivered to priority areas without inadvertent overloading by ancillary loads. The exact strategy (which circuits to put on backup) should be developed in consultation with ZICA during the design phase, but the TOR expects lighting circuits and certain outlet circuits to be split accordingly. All new wiring must use properly sized copper conductors and rated insulation per local code (Zambian standards referencing BS or IEC wiring codes). Use separate circuit breakers for each new circuit in the panels, clearly labeled (e.g. "Solar Backup Lighting Circuit 1", "Backup Office Outlets Zone A", etc.). Coordination of protective devices

is important – ensure breaker sizes are appropriate for cable protection and compatible with upstream feeders. Any changes in the distribution board should maintain proper phase balancing for three-phase load distribution.

- **Protection and Switchgear**: Install any additional switchgear needed for safe operation. This includes: an adequately rated Main PV Disconnect (AC) to isolate the inverter system from the facility (could be a breaker or isolator on the AC output), coordinated with an Automatic Transfer Switch (ATS) if separate from the inverters. The ATS should have interlocks to prevent parallel operation of inverter and generator unless inverters are synchronizing properly. Include Surge Protective Devices (SPD Type II) on the AC mains to protect inverters and sensitive loads from grid or generator surges 7 . Overcurrent protection (breakers/fuses) must be installed for all circuits: AC combiner if multiple inverter outputs, battery-to-inverter DC links, etc. Earth leakage protection (RCD/GFCI) should be considered for new sub-circuits as required by code.
- **Earthing and Grounding**: The entire system must be properly earthed. All PV module frames and mounting structures should be bonded and connected to the existing earth grid of the facility to ensure equipotential bonding (to mitigate lightning and shock risk). The inverter and battery negative/neutral grounding should follow manufacturer guidance and local code – typically, in an AC-coupled system, the neutral is tied to earth at one point (often at the generator or main service entry). If the system operates as a separately derived source in island mode, ensure that an appropriate neutral-ground bonding is done on the backup side when islanded (some inverters have internal relays for this). Earthing of the generator, grid, and solar system must coordinate – the contractor's electrical design should address grounding to avoid any ground loops or unsafe conditions. Ground electrode: ensure the site earth electrode system has a low resistance (ideally <5 ohm; if existing earth is higher, add additional earth rods or plates to achieve a good ground). Test and report the earth resistance after installation.
- **Cable Management**: All cabling for the project should be installed in a neat, professional manner. Use cable trays, ladders, or conduits as appropriate to route cables from roof arrays to inverters and from inverters to distribution boards. Outdoor cables should be UV resistant; buried cables (if any) must be in conduit and buried at safe depth with warning tape above (per standards). Label all cables at both ends for identification (e.g. tags indicating "PV Array String 1 Positive", "Battery bank positive", "Inverter AC output to panel", etc.). This greatly aids in future maintenance and troubleshooting. Phase rotation on three-phase connections must be consistent (label phases R, Y, B or L1, L2, L3 accordingly). Torque all connections to manufacturer-specified values and use appropriate lugs/ferrules for terminations.
- **Compliance:** All electrical works shall conform to the latest edition of applicable standards – e.g. IEC 60364 (electrical installations) national wiring standards, and any ZABS (Zambian Bureau of Standards) electrical guidelines. The contractor must ensure a licensed electrician is supervising and that all work would pass inspection by local authorities or ZESCO. The installation should be inspected and tested (insulation resistance tests, continuity, proper earthing, etc.) before commissioning.

5.5 Monitoring and Control

- **Remote Monitoring System**: As required, the system must include a remote monitoring capability. The contractor has flexibility in proposing a solution, but it should be cost-effective and meet ZICA's needs. Acceptable solutions could be: the inverter manufacturer's cloud monitoring portal (many modern inverters come with Ethernet/GSM/WiFi logging devices that upload data to a cloud dashboard), or a third-party datalogger that aggregates data from inverters, battery BMS, etc., and presents it on a web platform. The monitoring should display at minimum: PV power production, battery state-of-charge (SOC) and voltage, load consumption (from the inverter or an external meter), and system status (grid on/off, generator on/off). It should also record historical data (daily energy produced, consumed, battery charge cycles, etc.) for performance analysis. Alarm notifications (via email/SMS or app push notifications) for critical events like inverter faults, battery low, or communication loss are highly desirable. ZICA should be provided access to this monitoring platform on their devices (computer and smartphone). If internet connectivity at the site is an issue, the contractor should propose a solution (such as a GSM-based logger with SIM card, if ethernet is not readily available). The monitoring data should be available for at least the warranty period of the system; if subscription fees are required, these should be disclosed.
- **On-site Control and Display**: In addition to remote monitoring, the system should have on-site displays or interfaces. The inverters typically have a front panel display – ensure these are installed in an accessible location to quickly view system status (inverter room). If multiple inverters, a consolidated control panel or communications hub that shows overall system status is useful. Critical parameters (battery SOC, system mode) should be visible. The system should allow manual control if needed – e.g., a way to manually disconnect the system or force charge batteries (these would mainly be via the inverter controls or external breakers). Provide any necessary control software or login credentials to ZICA and train them in its use.
- **Energy Metering**: Include any required metering devices. For instance, a bi-directional meter on the grid connection to measure import/export if net metering is anticipated, or sub-meters for load circuits if detailed monitoring is needed. At minimum, the system should have metering to track solar production (often the inverter's internal meter), battery charge/discharge, and grid usage. This data should feed into the monitoring system. Any revenue-grade meter required by ZESCO (for safety or compliance) should be installed if applicable.
- **Automation and Smart Controls**: If beneficial, the bidder can propose additional smart controls – for example, load management (ability to shed non-critical loads automatically if battery gets critically low to extend backup time), or time-of-use optimization (charging batteries from grid at off-peak if allowed, etc.). While not explicitly required, such features could enhance performance. The control algorithms should, however, prioritize simplicity and reliability to avoid overly complex system behavior that could confuse operators. Essential control setpoints like battery charge limits, generator auto-start thresholds, etc., should be agreed upon during commissioning and documented.

5.6 Performance, Safety, and Quality Standards

- **Performance Guarantees**: The installed system should meet certain performance criteria. At commissioning, the contractor must demonstrate that the system can support the full load (285.9 kW) on battery for the required duration (this might be via a calculated discharge test or partial simulation if full 24h test is impractical). The contractor should guarantee that the system's components perform as per their specifications – e.g. inverters achieve the promised efficiency and load support, the PV array is generating expected power under given irradiance, and the battery can store and deliver the intended energy. A capacity test of the battery bank shall be conducted during commissioning: typically, a discharge test at a known load to verify usable capacity (this could be done as a shorter high-rate test or sectional test to extrapolate 24h capacity). If any shortfall is found (e.g. battery not meeting capacity or other performance issues), the contractor must rectify it (add more panels, additional batteries, or replace faulty components) at no extra cost.

Standards Compliance: All equipment and installation work must comply with international and national standards. Key standards include (but are not limited to):

  - IEC 62548 – Installation and safety requirements for photovoltaic arrays. The installation must follow the best practices outlined in this standard, covering array wiring, isolation, earthing, etc.
  - IEC 60364 / BS 7671 (or local equivalent) – Electrical installations of buildings (wiring code) for all AC installations.
  - IEC 61727 / IEEE 1547 – Utility-interconnected photovoltaic inverters – ensuring no adverse effects on grid and proper anti-islanding.
  - IEC 62116 – Test procedure of islanding prevention measures for inverter systems (to ensure the anti-islanding works correctly).
  - Battery Standards: IEC 62619 (Safety of lithium batteries), UN 38.3 (transport safety, if shipping batteries), and relevant IEEE standards for battery systems. Lead-acid if used should conform to IEC 60896 or IEEE 485 (stationary battery standards).
  - Zambian Standards: Compliance with ZABS and ZESCO requirements for renewable energy systems is mandatory The system must adhere to any guidelines provided by ZESCO for grid-tied solar systems, including safety disconnects, harmonic limits, and remote monitoring provisions for large systems (note: ZESCO guidelines require systems 30 kW to allow remote monitoring by the utility 8 – the contractor may need to facilitate this, such as providing SCADA connection or read-only access for ZESCO, as applicable).

- **Quality Certifications**: Equipment should be from manufacturers with ISO 9001 (Quality Management) and ISO 14001 (Environmental Management) certifications to ensure product reliability. If possible, choose equipment that has been tested/certified by reputable labs (TÜV, UL, etc.).
- **Workmanship**: The installation workmanship should be of the highest quality. All electrical connections should be tight and tested, cables neatly arranged, and components securely mounted. There should be no exposed live parts accessible to

unauthorized persons. All enclosures must be closed and sealed against weather/intrusion (use appropriate glands for cable entry to maintain IP ratings). Labels and signage must be provided: e.g., warning labels on PV combiner boxes ("Danger – DC Solar Circuit XYZ V"), on battery banks ("Caution – Battery Bank [Voltage]"), on distribution boards indicating dual supply (grid + solar), etc. 15 . Use durable engraved or printed labels that won't fade. Safety signs for high voltage and authorized access only should be displayed on the battery/inverter room.

- **Testing and Commissioning**: The contractor is responsible for a thorough testing regime before handover. This includes: insulation resistance testing of cables, continuity tests, polarity checks on PV strings, functionality test of all protective devices (tripping of breakers, operation of disconnects), simulation of power failure to check auto-transfer, load test on battery (could be partial if full load test not possible for 24h, but demonstrate at least an extended run), and performance test of the PV system (confirm it produces expected current under given sunlight, etc.). All test results should be recorded in a Commissioning Report. Additionally, any required inspection by regulatory bodies (e.g. electrical inspector or utility representative) should be arranged. The Acceptance Test will involve ZICA representatives verifying that the system meets specifications – including that critical loads are indeed powered by the system during an outage and that the system transitions properly between grid, battery, and generator 16 . Only upon successful commissioning will the project be considered completed.
- **Safety During Installation**: The contractor must enforce strict safety protocols during the project execution. Installers working at height on the roof must use fall protection (harnesses, anchor points, scaffolding as needed). Electrical work on live circuits should be minimized; where necessary, only qualified electricians using appropriate PPE (insulated gloves, tools) should perform it, and with ZICA's approval for scheduled outages. The battery installation requires care in handling heavy batteries and live DC – follow proper procedures to avoid short circuits (use insulated tools, double-check polarity). If working with lithium batteries, be mindful of not damaging cells and follow the OEM's commissioning procedure. Fire extinguishers and first aid kits should be present on site. All workers should have appropriate training for their tasks, and a supervisor should oversee critical tasks like final AC tie-in. The site should be kept secure to prevent staff or visitors from wandering into work areas (use barriers and warning tape as needed). Upon project completion, ensure all tools and loose materials are removed and the site is left clean.

6. Deliverables and Documentation

The contractor shall provide the following deliverables over the course of the project:

- **Design Documents**: Within a 14 days after contract award the contractor must submit detailed design documents for approval. This includes electrical single-line diagrams, layout drawings (showing PV panel placement on roof/ground, inverter and battery layout), cable schedules, bill of materials, and equipment datasheets. A load analysis report should also be part of this submission, confirming how the 372 kW / 7 MWh design will meet the 285.9 kW load for 24h (including any assumptions about load

management or diversity factor). ZICA (or its technical consultants) will review and approve these designs before equipment procurement and installation begin.

- **Progress Reports**: During installation, provide brief progress updates (for example, weekly emails or meetings) to inform ZICA of status, any issues encountered, and upcoming work.
- **Testing & Commissioning Plan**: At least 2 weeks prior to commissioning, the contractor should submit a commissioning test plan. This plan will outline how the system will be tested, what measurements will be taken, and criteria for passing. It should cover tests for individual components (e.g. insulation test, polarity), subsystem tests (PV output, battery charge/discharge test, inverter functionality), and full system tests (power failure simulation, load test). ZICA may witness these tests, so a schedule should be included.
- **Commissioning Report**: After testing, a comprehensive report must be delivered. This report will document all test results, initial performance data (e.g. PV open-circuit voltage, short-circuit current measured, battery baseline capacity, etc.), and verification of meeting TOR specs. It should also note any deviations or corrective actions taken. ZICA's representative will sign off the completion based on this report and witnessing the tests.
- **As-Built Documentation**: Provide a full set of as-built drawings and schematics reflecting the system exactly as installed (if any changes occurred from the design). This includes updated single-line diagram, cable routes, earthing layout, etc. Also include a system operations manual specifically for ZICA – describing in plain language the system components, how to operate the system (normal operation and emergency procedures), and maintenance guidelines. All manufacturer manuals for inverters, batteries, monitoring devices, etc., should be handed over (both hardcopy and softcopy if available).
- **Training Materials**: Any slides, manuals or reference material used for training ZICA personnel should be provided in soft copy for future reference.
- **Warranty Certificates**: Official warranty documents for all major components (modules, inverters, batteries, etc.) must be submitted, ensuring ZICA can claim warranty service if needed.

  The contractor should summarize the warranty terms (duration and coverage) in a cover sheet. Additionally, if the contractor is offering any workmanship warranty or service guarantee, document those terms.

- **Maintenance Plan:** A recommended preventive maintenance schedule should be provided. This must list periodic tasks such as panel cleaning (e.g. monthly or as needed based on dust), battery health check (e.g. quarterly voltage checks or BMS reports), inverter firmware updates, tightening of cable connections (annually), etc. It should also include a checklist for routine inspection to quickly identify issues (like checking for any LED alarm on inverters, physical inspection of panels for damage or dirt, etc.). If the contractor is contracted for maintenance, they will follow this plan; if not, ZICA can use it to maintain the system or hire another firm.
- **Spare Parts and Tools**: Deliver any spare parts that were committed (e.g. a few spare PV modules, extra fuses, maybe a replacement inverter unit if part of package) and any

special tools (for instance, MC4 connector crimping tool, if needed for future repairs). Also, hand over any software or passwords required to access the system controls or monitoring (ensure ZICA has administrative access or a method to retrieve it if the platform is vendor-specific).

- **Completion and Acceptance**: Upon finishing installation and successful commissioning, the contractor will facilitate the formal acceptance process. This may involve a final walkthrough with ZICA officials, confirming each scope item is delivered. ZICA will then issue a Completion Certificate and an Operational Acceptance Certificate (the latter possibly after a few weeks or months of operation to ensure no latent defects, as per typical contract practice) 17 . The defects liability period begins after operational acceptance.

7. Contractor Qualifications and Experience

ZICA is looking for a competent contractor with proven expertise in large-scale solar power installations, particularly hybrid systems with battery storage. Bidders must meet the following minimum qualifications:

Relevant Experience: The firm should have at least 5 years of experience in the solar energy sector, with successful completion of projects of similar complexity. Experience with commercial or industrial PV installations of 100 kW is required, and having done battery-integrated (offgrid or hybrid) systems of significant size (e.g. large UPS or solar backup systems) will be a strong advantage. The bidder must provide a portfolio or list of at least 3 similar projects completed, including client references. Specifically, any projects in Zambia or sub-Saharan Africa, and projects involving grid-interactive battery systems, should be highlighted.

Technical Team: The bidder's team must include appropriately qualified personnel:

• A Project Manager with experience in managing renewable energy or electrical installation projects of this scale. This person will be the point of contact and responsible for project delivery, scheduling, and coordination.

• A Licensed Electrical Engineer (Professional Engineer) with specialization in power systems or renewable energy. This engineer should be registered with the Engineering Institute of Zambia and will sign off on the electrical designs and oversee critical aspects of the installation/commissioning.

• A Solar PV Specialist/Engineer who has designed and implemented solar PV projects (preferably certified, e.g. by NABCEP or other solar certification and demonstrated training in PV system design).

• A Battery Storage Specialist (this could be the same as the PV engineer if they have the skills, or a separate expert) knowledgeable in high-capacity battery systems, who will ensure the battery integration and BMS are correctly implemented.

• Qualified Electricians and Technicians: The on-site installation team should include electricians with valid licenses/certifications for electrical works. Welders or technicians for

mounting structures should have relevant trade qualifications. All personnel should be versed in safety practices.

- It is expected that the team has at least one member with OEM training or certification for the key components (for example, if a particular inverter brand is proposed, having a technician certified for that brand's installation/commissioning is a plus).

- Financial and Legal Standing: The bidder should be a registered company in good standing, with the financial capacity to execute a project of this magnitude (as evidenced by financial statements or bank references if required). They should have up-to-date tax clearance and any necessary contracting licenses in Zambia.

- Local Presence: Having a local presence or partnerships in Zambia is important for logistics and after-sales support. Bidders should either have an office or service team based in Zambia, or demonstrate how they will provide prompt support (max 24-48h response time) for any maintenance issues that arise.

- Health and Safety Policy: The contractor must have a documented Health, Safety and Environment (HSE) policy or plan for the project. This includes training workers in safety, providing personal protective equipment, and adhering to regulations (like work-at-height rules, electrical safety codes, etc.).

- Manufacturer Authorizations: It is preferable if the bidder can supply letters from major component manufacturers (panels, inverters, batteries) indicating they are an authorized distributor or installer.

- Quality Assurance: An ISO 9001 certification or similar quality management system in the organization will be an added advantage. The bidder should describe their quality control procedures for design, procurement (ensuring genuine products), installation (checklists, supervision), and commissioning.

ZICA reserves the right to verify the information provided in the bids and to disqualify any bidder who is found to have misrepresented their qualifications or experience.

8. Proposal Submission Requirements

The following Checklist is provided to help the Bidder organize and consistently present its Technical Bid. For each of the following Technical Requirements, the Bidder must describe how its Technical Bid responds to each Requirement. In addition, the Bidder must provide cross references to the relevant supporting information, if any, included in the bid. The cross reference should identify the relevant document(s), page number(s), and paragraph(s). The Technical Responsiveness Checklist does not supersede the rest of the Technical Requirements (or any other part of the Bidding Documents). If a requirement is not mentioned in the Checklist that does not relieve the Bidder from the responsibility of including supporting evidence of compliance with that other requirement in its Technical Bid. One- or two-word responses (e.g. "Yes," "No," "Will comply," etc.) are normally not sufficient to confirm technical responsiveness with Technical Requirements.

Each requirement in this section has been assigned points. For each requirement, the Bidder must state whether they are compliant, partially compliant or non-compliant. Full points will be awarded when compliant, half points will be awarded for partially compliant and no points will be awarded for non-compliant. The sum total of points in this section is 120 The bidder must attain at least 90 points to pass this stage.

Bidders must prepare a Technical Proposal and a Financial Proposal in response to this TOR. The technical proposal will be evaluated in detail, so it should be clear, organized, and sufficiently detailed to demonstrate understanding and capability. At a minimum, the technical proposal should include:

No.	Description	Assign Score	Statement of Compliance	Bidder's reference document including page number
1	**Executive Summary:** A brief overview of the proposed solution, highlighting how it meets the requirements (no more than 1-2 pages).	5		
2	**Load Analysis and System Sizing:** An analysis of ZICA's load (based on the given 285.9 kW figure and any assumed load profile) and justification of the system sizing. Include calculations or estimates of daily energy consumption vs. solar production, battery autonomy calculations, etc., to show that the 372 kW PV and proposed battery capacity will indeed meet the 24-hour backup requirement. If any assumptions are made (e.g. critical vs. non-critical load segregation or using generator support after X hours), state them clearly.	10		
3	**System Design and Configuration:** A detailed description of the proposed system configuration. This should include the make and model of major components (PV modules, inverters, batteries, etc.), the quantity of each, and how they will be connected. Provide a preliminary single-line diagram to illustrate the system architecture. Describe the operation modes (grid-tied, off-grid) and how seamless transfer is achieved. Also, specify the battery bank configuration (voltage, Ah, number of modules).	10		
4	**Equipment Specifications**: For each major component, provide datasheets or a summary of key specs. This includes PV module wattage, efficiency, expected number of panels; inverter capacity per unit, features (e.g. surge rating, communication, etc.); battery type and capacity; mounting structure details; any charge controllers or additional equipment. Highlight compliance with standards (e.g. IEC certifications) and warranties offered. Bidders must clearly indicate the brand for the Inverter and Batteries and the minimum warranty period.	10		
5	**Integration and Controls:** Explain how the system will integrate with the grid and generator. If using an ATS, describe its rating and operation. If the inverter directly manages generator input, explain the requirements on the generator (e.g. frequency stability, etc.). Also describe the monitoring system	10		

No.	Description	Assign Score	Statement of Compliance	Bidder's reference document including page number
	proposed – include screenshots or descriptions of the interface if possible, and note if it's web-based, any subscription fees, etc.			
6	**Installation Plan:** Outline the approach to installation. Mention anticipated placement of components (e.g. "300 panels on roof area A, 500 panels on ground-mounted structure in parking area B"), any roof reinforcement needed, routing of cables (e.g. via cable trays along building), location of inverter room and battery banks. Include an estimated project schedule (Gantt chart) showing design approval, site preparation, installation phases (mounting, wiring, testing), and commissioning. Also address how you will manage construction safety and minimize disturbance (e.g. "major tie-in will be done on a weekend outage of 4 hours with generator support").	10		
7	**Performance and Reliability Features**: Discuss any design features intended to improve performance or reliability – e.g. module-level power electronics (optimizers or micro-inverters, if using, though likely not for this scale), redundancy in inverters (if one fails, others carry load), battery management strategies to extend life, etc. If the system supports remote troubleshooting or automatic fault diagnostics, mention that.	10		
8	**Compliance and Standards**: Confirm adherence to the technical standards mentioned in the TOR. If local permitting or approvals are needed (for example, ZESCO inspection for a grid-tied system), note your plan for obtaining those.	10		
9	**Commissioning and Testing Plan**: Summarize how you will conduct commissioning. You can reference the more detailed plan in Section 6 deliverables, but in the proposal give confidence that you have a systematic approach to testing every aspect of the system and that you will verify performance. Mention the involvement of ZICA staff in testing and any training to be given during that time.	10		
10	**Warranty and After-Sales Support**: State the warranty periods for all equipment and what they cover. Also state the workmanship warranty (usually 1 year from commissioning). Describe the service support – for example, "We have a local office in Lusaka with technicians who can be onsite within 24 hours for any critical issue" or "We will conduct quarterly preventive maintenance visits in the first year", etc.	10		

No.	Description	Assign Score	Statement of Compliance	Bidder's reference document including page number
	If you offer an extended maintenance contract, you can mention the terms (optional for ZICA to take up).			
11	**Team and Qualifications**: Introduce the project team, including names, titles, and brief CVs of key personnel (Project manager, lead engineer, site supervisor, etc.). Emphasize relevant project experience for each. Also indicate subcontractors or partners if any (e.g. a local construction partner for civil works, etc.). Provide references from past projects that ZICA may contact.	5		
12	**Work Plan and Timeline:** Provide a timeline for the project from contract signing to commissioning. Indicate key milestones: design/finalization, equipment procurement (with lead times for importing if any), site works start, mounting complete, electrical complete, testing, etc. If there are any potential challenges in meeting timeframes (like long lead items), address how you will mitigate them (e.g. choosing readily available equipment).	5		
13	**Risk Assessment**: Briefly identify any major risks you foresee (technical, logistical, etc.) and how you will manage them. For example, "Risk: Delay in battery delivery – Mitigation: have alternate supplier or stock, etc.", "Risk: Inclement weather affecting installation – Mitigation: schedule critical lifts in dry season, build some float into schedule".	5		
14	**Exclusions or Deviations**: Explicitly state any requirements of the TOR that you cannot fulfill or propose a deviation for, with reasoning. If none, state full compliance.	5		
15	**The Financial Proposal** (to be submitted separately as per procurement guidelines) should include a detailed cost breakdown: equipment costs, installation labor, any civil works, transport/logistics, taxes/ duties, etc. Also include costs for any optional items (like extended maintenance, spare parts kit beyond what's required, etc.) separately. The pricing should be in Zambian Kwacha. Milestone payment schedule can be proposed (e.g. mobilization, delivery of equipment, installation progress, commissioning, etc.).	5		

Note: The evaluation will consider both technical quality and cost. ZICA is not obliged to select the lowest bid; rather, the aim is to obtain the best value solution meeting the technical requirements. Innovation is welcome, but the core requirements (system size, backup duration, integration) must be met. Bidders are encouraged to visit the site (a site visit will be arranged) to assess conditions

9. Timeline and Implementation

ZICA intends to implement this project promptly to address its power reliability needs. The tentative timeline expectations are:

- Tendering and Award: Bidders should keep their proposals valid for at least 90 days.

- Project Kick-off: Immediately upon award, a kick-off meeting will be held. The contractor should be ready to commence site assessment and detailed design immediately thereafter.

- Design and Approval: 2 weeks for detailed design and documentation approval by ZICA.

- Installation and Commissioning: [8-12] weeks for on-site works including mounting, wiring, testing. This assumes a well-staffed team working efficiently; if the contractor proposes a different duration, it should be justified (complex civil works, etc., could extend timeline). Coordination with ZICA's schedule (e.g. working weekends or off-hours for critical tie-in) should be accounted for.

- Project Completion: Targeted within 4 to 6 months from contract signing for full completion and commissioning.

Bidders should commit to a realistic schedule in their proposals. If acceleration is possible, indicate how (e.g. ready stock of panels, etc.). Conversely, if more time is needed for a high-quality job or due to dependencies, explain those too. ZICA is open to discussing the timeline, but continuity of operations and earliest realization of backup capability is a priority.

10. Standards of Contract and Payment

- The contract will be a fixed-price, lump-sum contract including all duties and taxes. Payment terms will be tied to milestones (for example: advance on signing, payment on equipment delivery, payment on installation completion, final payment on commissioning and acceptance).

Bidders can propose a schedule, but ZICA reserves the right to negotiate the final terms.

- The contractor will be responsible for obtaining any work permits, insurance (liability insurance, workman's compensation for staff, etc.) and ensuring all regulatory compliance.

- During the defect liability period (12 months from acceptance), a portion of payment may be retained or a performance bond held, to ensure any defects are rectified. After this period, and after addressing any issues, the retention will be released.

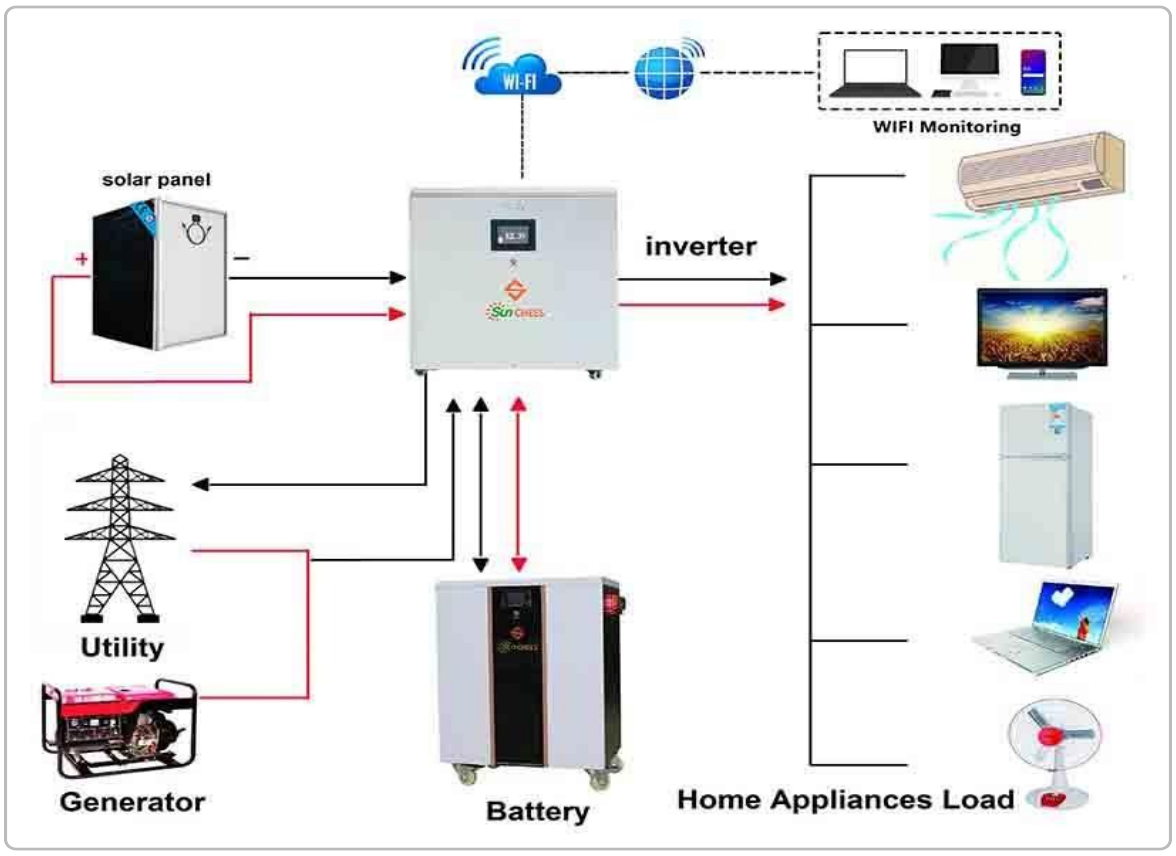
- If the contractor fails to meet the performance requirements (e.g. system does not achieve 24h autonomy due to design shortfall), they will be obligated to correct it at their cost (e.g. adding additional batteries or panels).

- ZICA will provide reasonable access to the site and necessary facilitation (e.g. access to electrical rooms, security escorts) but the contractor should be largely self-sufficient (bring own tools, equipment, and lodging for workers if from out of town). Any use of ZICA's facilities (power, water) should be discussed, though typically construction power and water can be provided.

- Detailed terms and conditions will be as per the contract document provided to the winning bidder.

Drawings

Illustrative diagram of a hybrid solar PV system with battery backup, integrating with both utility grid and a backup generator. The hybrid inverter acts as the central control unit, managing power input from solar panels and the grid/generator, and output to the building loads. It charges the battery when excess power is available and discharges the battery to supply loads during outages



Supplementary Information

PART 3 – Conditions of Contract and Contract Forms

Section VII. General Conditions of Contract

These General Conditions of Contract (GCC), read in conjunction with the Particular Conditions of Contract (PCC) and other documents listed therein, should be a complete document expressing fairly the rights and obligations of both parties.

These General Conditions of Contract have been developed on the basis of considerable international experience in the drafting and management of contracts, bearing in mind a trend in the construction industry towards simpler, more straightforward language.

The GCC can be used for both smaller admeasurement contracts and lump sum contracts.

Table of Clauses

General Conditions of Contract

A. General

1. Definitions

1.1 Boldface type is used to identify defined terms.

(a) The Accepted Contract Amount means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.

(b) The Activity Schedule is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.

(c) The Adjudicator is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.

(d) Bill of Quantities means the priced and completed Bill of Quantities forming part of the Bid.

(e) Compensation Events are those defined in GCC Clause 41 hereunder.

(f) The Completion Date is the date of completion of the Works as certified by the Project Manager, in accordance with GCC Sub-Clause 52.1.

(g) The Contract is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC Sub-Clause 2.3 below.

(h) The Contractor is the party whose Bid to carry out the Works has been accepted by the Employer.

(i) The Contractor's Bid is the completed bidding document submitted by the Contractor to the Employer.

(j) The Contract Price is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.

(k) Days are calendar days; months are calendar months.

(l) Dayworks are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.

(m) A Defect is any part of the Works not completed in accordance with the Contract.

(n) The Defects Liability Certificate is the certificate issued by Project Manager upon correction of defects by the Contractor.

(o) The Defects Liability Period is the period **named in the PCC** pursuant to Sub-Clause 33.1 and calculated from the Completion Date.

(p) Adjudicator means the single person appointed under Clause 23.

(q) Drawings means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Employer in accordance with the Contract, include calculations and other information provided or approved by the Project Manager for the execution of the Contract.

(r) The Employer is the party who employs the Contractor to carry out the Works, **as specified in the PCC**.

(s) Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

(t) "In writing" or "written" means hand-written, type-written, printed or electronically made, and resulting in a permanent record;

(u) The Initial Contract Price is the Contract Price listed in the Employer's Letter of Acceptance.

(v) The Intended Completion Date is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is **specified in the PCC**. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.

(w) Materials are all supplies, including consumables, used by the Contractor for incorporation in the Works.

(x) Plant is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.

(y) The Project Manager is the person **named in the PCC** (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.

(z) PCC means Particular Conditions of Contract

(aa) The Site is the area **defined as such in the PCC**.

(bb) Site Investigation Reports are those that were included in the bidding documents and are factual and interpretative reports about the surface and subsurface conditions at the Site.

(cc) Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.

(dd) The Start Date is **given in the PCC**. It is the latest date when the Contractor shall commence execution of the

Works. It does not necessarily coincide with any of the Site Possession Dates.

(ee) A Subcontractor is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.

(ff) Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.

(gg) A Variation is an instruction given by the Project Manager which varies the Works.

(hh) The Works are what the Contract requires the Contractor to construct, install, and turn over to the Employer, **as defined in the PCC**.

2. Interpretation

2.1 In interpreting these GCC, words indicating one gender include all genders. Words indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.

2.2 If sectional completion is **specified in the PCC**, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

2.3 The documents forming the Contract shall be interpreted in the following order of priority:

(a) Agreement,
(b) Letter of Acceptance,
(c) Contractor's Bid,
(d) Particular Conditions of Contract,
(e) General Conditions of Contract,
(f) Specifications,
(g) Drawings,
(h) Bill of Quantities,[10] and
(i) any other document **listed in the PCC** as forming part of the Contract.

3. Language and Law

3.1 The language of the Contract and the law governing the Contract are **stated in the PCC**.

[10] *In lump sum contracts, delete "Bill of Quantities" and replace with "Activity Schedule."*

4. Project Manager's Decisions	4.1	Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Employer and the Contractor in the role representing the Employer.
5. Delegation	5.1	Otherwise specified in the PCC, the Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may revoke any delegation after notifying the Contractor.
6. Communications	6.1	Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.
7. Subcontracting	7.1	The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations.
8. Other Contractors	8.1	The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as **referred to in the PCC.** The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.
9. Personnel and Equipment	9.1	The Contractor shall employ the key personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
	9.2	If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.
10. Employer's and Contractor's Risks	10.1	The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.
11. Employer's Risks	11.1	From the Start Date until the Defects Liability Certificate has been issued, the following are Employer's risks:

(a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to

(i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or

(ii) negligence, breach of statutory duty, or interference with any legal right by the Employer or by any person employed by or contracted to him except the Contractor.

(b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.

11.2 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an Employer's risk except loss or damage due to

(a) a Defect which existed on the Completion Date,

(b) an event occurring before the Completion Date, which was not itself an Employer's risk, or

(c) the activities of the Contractor on the Site after the Completion Date.

12. Contractor's Risks

12.1 From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer's risks are Contractor's risks.

13. Insurance

13.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles **stated in the PCC** for the following events which are due to the Contractor's risks:

(a) loss of or damage to the Works, Plant, and Materials;

(b) loss of or damage to Equipment;

(c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and

(d) personal injury or death.

13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

13.4 Alterations to the terms of an insurance shall not be made without the approval of the Project Manager.

13.5 Both parties shall comply with any conditions of the insurance policies.

14. Site Data

14.1 The Contractor shall be deemed to have examined any Site Data **referred to in the PCC**, supplemented by any information available to the Contractor.

15. Contractor to Construct the Works

15.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.

16. The Works to Be Completed by the Intended Completion Date

16.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.

17. Approval by the Project Manager

17.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.

17.2 The Contractor shall be responsible for design of Temporary Works.

17.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.

17.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.

18. Safety

18.1 The Contractor shall be responsible for the safety of all activities on the Site.

19. Discoveries

19.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.

20. Possession of the Site

20.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date **stated in the PCC,** the Employer shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.

21. Access to the Site

21.1 The Contractor shall allow the Project Manager and any person authorized by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

22. Instructions, Inspections and Audits

22.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.

22.2 The Contractor shall permit, and shall cause its Subcontractors and subconsultants to permit, the Government and/or persons appointed by the Government to inspect the Site and/or the accounts and records of the Contractor and its sub-contractors relating to the performance of the Contract and the submission of the bid, and to have such accounts and records audited by auditors appointed by the Government if requested by the Government. The Contractor's and its Subcontractors' and subconsultants' attention is drawn to Sub-Clause 57.1 which provides, inter alia, that acts intended to materially impede the exercise of the Government's inspection and audit rights provided for under Sub-Clause 22.2 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to ZPPA's prevailing sanctions procedures).

23. Appointment of the Adjudicator

23.1 The Adjudicator shall be appointed jointly by the Employer and the Contractor, at the time of the Employer's issuance of the Letter of Acceptance. If, in the Letter of Acceptance, the Employer does

not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority **designated in the PCC**, to appoint the Adjudicator within 14 days of receipt of such request.

23.2 Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority **designated in the PCC** at the request of either party, within 14 days of receipt of such request.

24. Procedure for Disputes

24.1 If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Project Manager's decision.

24.2 The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.

24.3 The Adjudicator shall be paid by the hour at the **rate specified in the PCC,** together with reimbursable expenses of the types **specified in the PCC**, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision shall be final and binding.

24.4 The arbitration shall be conducted in accordance with the arbitration procedures published by the institution named and in the place specified **in the PCC.**

B. Time Control

25. Program

25.1 Within the time **stated in the PCC**, after the date of the Letter of Acceptance, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump sum contract, the activities in the Program shall be consistent with those in the Activity Schedule.

25.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress

achieved on the timing of the remaining work, including any changes to the sequence of the activities.

25.3 The Contractor shall submit to the Project Manager for approval an updated Program at intervals no longer than the period **stated in the PCC.** If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount **stated in the PCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of a lump sum contract, the Contractor shall provide an updated Activity Schedule within 14 days of being instructed to by the Project Manager.

25.4 The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.

26. Extension of the Intended Completion Date

26.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.

26.2 The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

27. Acceleration

27.1 When the Employer wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Employer accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Employer and the Contractor.

27.2 If the Contractor's priced proposals for an acceleration are accepted by the Employer, they are incorporated in the Contract Price and treated as a Variation.

28. Delays Ordered by the Project Manager

28.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.

29. Management Meetings

29.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

29.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

30. Early Warning

30.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.

30.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.

C. Quality Control

31. Identifying Defects

31.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.

32. Tests

32.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.

33. Correction of Defects

33.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is **defined in the PCC.** The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

33.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.

34. Uncorrected Defects

34.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.

D. Cost Control

35. Contract Price

35.1 In the case of an admeasurement contract, the Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.

35.2 In the case of a lump sum contract, the Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. If payment for Materials on Site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.

36. Changes in the Contract Price

36.1 In the case of an admeasurement contract:

(a) If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change.

(b) The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Employer.

(c) If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.

36.2 In the case of a lump sum contract, the Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.

37. Variations

37.1 All Variations shall be included in updated Programs, and, in the case of a lump sum contract, also in the Activity Schedule, produced by the Contractor.

37.2 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.

37.3 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.

37.4 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.

37.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.

37.6 In the case of an admeasurement contract, if the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in Sub-Clause 38.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.

38. Cash Flow Forecasts

38.1 When the Program, or, in the case of a lump sum contract, the Activity Schedule, is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

39. Payment Certificates

39.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.

39.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.

39.3 The value of work executed shall be determined by the Project Manager.

39.4 The value of work executed shall comprise:

(a) In the case of an admeasurement contract, the value of the quantities of work in the Bill of Quantities that have been completed; or

(b) In the case of a lump sum contract, the value of work executed shall comprise the value of completed activities in the Activity Schedule.

39.5 The value of work executed shall include the valuation of Variations and Compensation Events.

39.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

40. Payments

40.1 Payments shall be adjusted for deductions for advance payments and retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 28 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.

40.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.

40.3 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.

40.4 Items of the Works for which no rate or price has been entered in shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

41. Compensation Events

41.1 The following shall be Compensation Events:

(a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1.

(b) The Employer modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.

(c) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.

(d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.

(e) The Project Manager unreasonably does not approve a subcontract to be let.

(f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.

(g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.

(h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.

(i) The advance payment is delayed.

(j) The effects on the Contractor of any of the Employer's Risks.

(k) The Project Manager unreasonably delays issuing a Certificate of Completion.

41.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion

Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

41.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.

41.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.

42. Tax

42.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 28 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC Clause 44.

43. Currencies

43.1 Where payments are made in currencies other than the currency of the Employer's country **specified in the PCC,** the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Contractor's Bid.

44. Price Adjustment

44.1 Prices shall be adjusted for fluctuations in the cost of inputs only if **provided for in the PCC.** If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type indicated below applies to each Contract currency:

$$\mathbf{P_c = A_c + B_c\ Imc/Ioc}$$

where:

P_c is the adjustment factor for the portion of the Contract Price payable in a specific currency "c."

A_c and B_c are coefficients[11] **specified in the PCC,** representing the nonadjustable and adjustable portions, respectively, of the Contract Price payable in that specific currency "c;" and

Imc is the index prevailing at the end of the month being invoiced and Ioc is the index prevailing 28 days before Bid opening for inputs payable; both in the specific currency "c."

44.2 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.

45. Retention

45.1 The Employer shall retain from each payment due to the Contractor the proportion **stated in the PCC** until Completion of the whole of the Works.

45.2 Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC 51.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an "on demand" Bank guarantee.

46. Liquidated Damages

46.1 The Contractor shall pay liquidated damages to the Employer at the rate per day **stated in the PCC** for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount **defined in the PCC.** The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.

46.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC Sub-Clause 40.1.

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[11] *The sum of the two coefficients A_c and B_c should be 1 (one) in the formula for each currency. Normally, both coefficients shall be the same in the formulae for all currencies, since coefficient A, for the nonadjustable portion of the payments, is a very approximate figure (usually 0.15) to take account of fixed cost elements or other nonadjustable components. The sum of the adjustments for each currency are added to the Contract Price. [To be transferred to the User Guide]*

47. Bonus

47.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day **stated in the PCC** for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.

48. Advance Payment

48.1 The Employer shall make advance payment to the Contractor of the amounts **stated in the PCC** by the date **stated in the PCC,** against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer in amounts and currencies equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.

48.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.

48.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.

49. Securities

49.1 The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount **specified in the PCC,** by a bank or surety acceptable to the Employer, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until a date 28 days from the date of issue of the Certificate of Completion in the case of a Bank Guarantee, and until one year from the date of issue of the Completion Certificate in the case of a Performance Bond.

50. Dayworks

50.1 If applicable, the Dayworks rates in the Contractor's Bid shall be used only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.

50.2 All work to be paid for as Dayworks shall be recorded by the Contractor on forms approved by the Project Manager. Each

completed form shall be verified and signed by the Project Manager within two days of the work being done.

50.3 The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.

51. Cost of Repairs

51.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

52. Completion

52.1 The Contractor shall request the Project Manager to issue a Certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the whole of the Works is completed.

53. Taking Over

53.1 The Employer shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion.

54. Final Account

54.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.

55. Operating and Maintenance Manuals

55.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates **stated in the PCC.**

55.2 If the Contractor does not supply the Drawings and/or manuals by the dates **stated in the PCC** pursuant to GCC Sub-Clause 55.1**,** or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount **stated in the PCC** from payments due to the Contractor.

56. Termination

56.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

56.2 Fundamental breaches of Contract shall include, but shall not be limited to, the following:

(a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager;

(b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 28 days;

(c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;

(d) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 84 days of the date of the Project Manager's certificate;

(e) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;

(f) the Contractor does not maintain a Security, which is required;

(g) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as **defined in the PCC**; or

(h) if the Contractor, in the judgment of the Employer, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract, pursuant to GCC Clause 57.1.

56.3 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC Sub-Clause 56.2 above, the Project Manager shall decide whether the breach is fundamental or not.

56.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.

56.5 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

57. Fraud and Corruption

57.1 If the Employer determines that the Contractor and/or any of its personnel, or its agents, or its Subcontractors, subconsultants, services providers, suppliers and/or their employees has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Employer may, after giving 14 days notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from

the Site, and the provisions of Clause 56 shall apply as if such expulsion had been made under Sub-Clause 56.5 [Termination by Employer].

57.2 Should any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Works, then that employee shall be removed in accordance with Clause 9.

57.3 For the purposes of this Sub-Clause:

(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[12];

(ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation[13];

(iii) "collusive practice" is an arrangement between two or more parties[14] designed to achieve an improper purpose, including to influence improperly the actions of another party;

(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[15];

(v) "obstructive practice" is

(aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Government 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

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12 "Another party" refers to a public official acting in relation to the procurement process or contract execution]. In this context, "public official" includes Government staff and employees of other organizations taking or reviewing procurement decisions.

13 "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.

14 "Parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

15 "Party" refers to a participant in the procurement process or contract execution.

(bb) acts intended to materially impede the exercise of the Government's inspection and audit rights provided for under Sub-Clause 22.2.

58. Payment upon Termination

58.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as **indicated in the PCC.** Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.

58.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

59. Property

59.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer if the Contract is terminated because of the Contractor's default.

60. Release from Performance

60.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

61. Suspension of Contractor

61.1 In the event that ZPPA suspends the Contractor pursuant to the Public Procurement Act of 2008:

(a) The Employer is obligated to notify the Contractor of such suspension within 7 days of having received ZPPA's suspension notice.

(b) If the Contractor has not received sums due it within the 28 days for payment provided for in Sub-Clause 40.1, the Contractor may immediately issue a 14-day termination notice.

Section VIII. Particular Conditions of Contract

A. General	
GCC 1.1 (r)	The Employer is **The Chief Executive Officer** **Zambia Institute of Chartered Accountants** **Accountants Park** **2374/A Thabo Mbeki Road** **Lusaka** **Zambia**
GCC 1.1 (v)	The Intended Completion Date for the whole of the Works shall be ***4 to 6 Months***
GCC 1.1 (y)	The Project Manager is ***Director Finance, Investments & Administration***
GCC 1.1 (aa)	The Site is located at ***Zambia Institute of Chartered Accountants Accountants Park 2374/A Thabo Mbeki Road Lusaka.***
GCC 1.1 (dd)	The Start Date shall be ***after contract signing***
GCC 1.1 (hh)	The Works consist of **the installation of a solar photovoltaic (PV) backup power solution to ensure uninterrupted electricity supply at The Zambia Institute of Chartered Accountants (ZICA). Frequent grid outages and the need for reliable power to support critical operations have prompted this initiative. The objective of this project is to design, supply, deliver, install, and commission a solar PV system with battery storage that can sustain the full institutional load for at least 24 hours without grid power. This system will integrate with the existing ZESCO electrical grid and on-site diesel generator to provide seamless power continuity and energy cost savings**
GCC 2.2	Sectional Completions are: *As stated in the specification schedule.*
GCC 2.3(i)	The following documents also form part of the Contract: ***Bidder's bid documents***

GCC 3.1	The language of the contract is **English** The law that applies to the Contract is the law of **Zambia.**
GCC 5.1	The Project manager *may* delegate any of his duties and responsibilities.
GCC 8.1	Schedule of other contractors: *TBA*
GCC 13.1	The minimum insurance amounts and deductibles shall be: (a) for loss or damage to the Works, Plant and Materials: *TBA* (b) For loss or damage to Equipment: *TBA* (c) for loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection with Contract *TBA* (d) for personal injury or death: (i) of the Contractor's employees: *TBA* (ii) of other people: *TBA*
GCC 14.1	Site Data are: *As stated in the specification schedule*
GCC 20.1	The Site Possession Date(s) shall be: *TBA after contract signing*
GCC 23.1 & GCC 23.2	Appointing Authority for the Adjudicator: *TBA*
GCC 24.3	Hourly rate and types of reimbursable expenses to be paid to the Adjudicator: *TBA*
GCC 24.4	The place of arbitration shall be: *Zambia*
B. Time Control	
GCC 25.1	The Contractor shall submit for approval a Program for the Works within *14* days from the date of the Letter of Acceptance.
GCC 25.3	The period between Program updates is *7* days. The amount to be withheld for late submission of an updated Program is *TBA*
C. Quality Control	
GCC 33.1	The Defects Liability Period is: *365* days.
D. Cost Control	

GCC 43.1	The currency of the Employer's country is: *Zambian Kwacha*
GCC 44.1	The Contract *is not* subject to price adjustment in accordance with GCC Clause 44, and the following information regarding coefficients *does not* apply.
GCC 45.1	The proportion of payments retained is: *[insert percentage]* *[The retention amount is usually close to 5 percent and in no case exceeds 10 percent.]*
GCC 46.1	The liquidated damages for the whole of the Works are 0.10% of *the final Contract Price* per day. The maximum amount of liquidated damages for the whole of the Works is *10%* of the final Contract Price.
GCC 47.1	The Bonus for the whole of the Works is ***N/A***
GCC 48.1	The Advance Payments shall be 15% of contract amount and shall be paid to the Contractor no later than *7 days after contract signing*.
GCC 49.1	The Performance Security amount is *[insert amount(s) denominated in the types and proportions of the currencies in which the Contract Price is payable, or in a freely convertible currency acceptable to the* Employer*]* (a) Bank Guarantee: *10% of contract price* (b) Performance Bond: 30% of the contract price.
E. Finishing the Contract	
GCC 55.1	The date by which operating and maintenance manuals are required is *14 days before final commissioning.* The date by which "as built" drawings are required is *14 days after commissioning.*
GCC 55.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required in GCC 58.1 is *5% of contract price*
GCC 56.2 (g)	The maximum number of days is: *14 days*
GCC 58.1	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is *TBA*

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.

Table of Forms

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 Appendix to Bid]*** . . . . for the Accepted Contract Amount of the equivalent of . . . . . ***.[insert amount in numbers and words and name of currency]***, as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose the of the Performance Security Form included in Section IX (Contract Forms) of the Bidding Document.

[Choose one of the following statements:]

We accept that _____***[insert the name of Adjudicator proposed by the Bidder]*** be appointed as the Adjudicator.

[or]

We do not accept that _____***[insert the name of the Adjudicator proposed by the Bidder]*** be appointed as the Adjudicator, and by sending a copy of this Letter of Acceptance to _____***[insert name of the Appointing Authority]***, the Appointing Authority, we are hereby requesting such Authority to appoint the Adjudicator in accordance with ITB 42.1 and GCC 23.1.

Authorized Signature: .....

Name and Title of Signatory: .....

Name of Agency: .....

Attachment: Contract Agreement

Contract Agreement

THIS AGREEMENT made the . . . . . .day of . . . . . ., ..., between . . . . . ***[name of the*** Employer***]***. . . . . (hereinafter "the Employer"), of the one part, and . . . . . ***[name of the Contractor]***. . . . .(hereinafter "the Contractor"), of the other part:

WHEREAS the Employer desires that the Works known as . . . . . ***[name of the Contract]***. . . . .should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents**.**

(a) the Letter of Acceptance

(b) the Bid

(c) the Addenda Nos . . . . . ***[insert addenda numbers if any]***. . . . .

(d) the Particular Conditions

(e) the General Conditions;

(f) the Specification

(g) the Drawings*;* and

(h) the completed Schedules,

3. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of . . . . . ***[name of the borrowing country]***. . . . .on the day, month and year indicated above.

Signed by: .....
for and on behalf of the Employer

in the presence of: .....
Witness, Name, Signature, Address, Date

Signed by: .....
for and on behalf the Contractor

in the presence of: .....
Witness, Name, Signature, Address, Date

Performance Security

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

Beneficiary: .....*[Name and Address of* Employer*]* .....

Date: .....

Performance Guarantee No.: .....

We have been informed that . . . . . ***[name of the Contractor]***. . . . . (hereinafter called "the Contractor") has entered into Contract No. . . . . ***[reference number of the Contract]***. . . . . dated . . . . . .with you, for the execution of . . . . . ***[name of contract and brief description of Works]***. . . . . (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 Contractor, we . . . . . ***[name of the Bank]***. . . . . hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of . . . . . ***[name of the currency and amount in figures]*** [1]. . . . . (. . . . . ***[amount in words]***. . . . .) such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor 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 expire, no later than the . . . . . Day of . . . . . , ... [2], and any demand for payment under it must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458, except that subparagraph (ii) of Sub-article 20(a) is hereby excluded.

. . . . . .
[Seal of Bank and Signature(s)]

Note –
All italicized text is for guidance on how to prepare this demand guarantee and shall be deleted from the final document.

[1] *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.*

[2] *Insert the date twenty-eight days after the expected completion date. 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."

Advance Payment Security

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

Beneficiary: ..... *[Name and Address of Employer]* **.....**
Date: .....
Advance Payment Guarantee No.: .....

We have been informed that . . . . . ***[name of the Contractor]***. . . . . (hereinafter called "the Contractor") has entered into Contract No. . . . . ***[reference number of the Contract]***. . . . . dated . . . . . .with you, for the execution of . . . . . ***[name of contract and brief description of Works]***. . . . . (hereinafter called "the Contract").

Furthermore, we understand that, according to the Conditions of the Contract, an advance payment in the sum . . . . . ***[name of the currency and amount in figures]*** [1]. . . . . (. . . . . ***[amount in words]***. . . . .) is to be made against an advance payment guarantee.

At the request of the Contractor, we . . . . . ***[name of the Bank]***. . . . . hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of . . . . . ***[name of the currency and amount in figures]****. . . . . (. . . . . ***[amount in words]***. . . . .) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than the costs of mobilization in respect of the Works.

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 Contractor on its account number . . . . . ***[Contractor's account number]***. . . . . at . . . . . ***[name and address of the Bank]***. . . . . .

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor 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 . . . . . , ... [2], 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, ICC Publication No. 458.

. . . . . ***[Seal of Bank and Signature(s)]***. . . . . .

Note –
All italicized text is for guidance on how to prepare this demand guarantee and shall be deleted from the final document.

1 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.

2 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 [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.