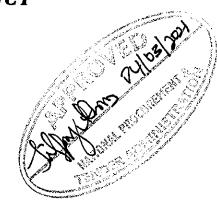
# STANDARD BID SOLICITATION DOCUMENT GOVERNMENT OF GUYANA



Supply, Installation and Commissioning of ten (10) 1.2 kWp Off-Grid Solar Photovoltaic Systems in Advent Acres, Loo Creek, Region 4

**GUYANA ENERGY AGENCY** 

**March 2021** 



# GOODS AND RELATED SERVICES (VALUE G3.0 million to G\$15 Million)

# Introduction

#### **Preface**

This Standard Bidding Solicitation Document (SBSD) have been prepared by the NPTA for use by the Procuring Entities for the procurement of goods and services. The procedures and methods presented in this document have been developed on the basis of practical experience and are mandatory for use in the procurement carried out in whole or in part from the state funds in accordance with the provisions of the Procurement Law.

In order to simplify the preparation of the bidding documents for each individual procurement proceeding, the SBSD groups the provisions that are not intended to be changed in "the Instructions to Bidders" and in "the General Conditions of Contract". Data and provisions specific to each procurement and contract should be included in the Bid Data Sheet, the Special Conditions of the Contract, Technical specifications, price schedule, schedule of requirements and the Evaluation Criteria. The applicable forms are listed in the table of contents, below.

Request for additional information can be forwarded to:

Guyana Energy Agency 295 Quamina Street, South Cummingsburg, Georgetown. Telephone number: 226-0394 or fax 226-5227 gea@gea.gov.gy www.gea.gov.gy

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# **INVITATION FOR BIDS (IFB**

- 1. The Guyana Energy Agency hereinafter referred to as "the Procuring Entity", invites eligible bidders to submit their bids for the Supply, Installation and Commissioning of Ten (10) 1.2 kWp Off-Grid Solar Photovoltaic Systems in Advent Acres, Loo Creek, Region 4 as per the required specifications mentioned in the Bidding Documents
- 2. The required period for completion of the work is ninety (90) days from the signing of the contract.

Bidders are required to visit the site to carry out their own assessment of how the systems will be installed. GEA would contact the entities and request access to the site by the bidders upon the bidder's request. The costs of visiting the site shall be at the bidder's own expense.

- 3. The bidding documents may be obtained and be examined by any interested bidder. Bids can be purchased for a non-refundable fee in the amount of \$2,000 from the Cashier at the Guyana Energy Agency, 295 Quamina Street, South Cummingsburg, Georgetown, telephone 226-0394 or fax 226-5227, email at gea@gea.gov.gy
- 4. All Bidders should submit their bids together with an original bid security of two percent (2%) if bid amount is G\$15m and above, in the form of a Bank guarantee or a bond from an Insurance company licensed by the Bank of Guyana, however if bid amount is below G\$15m, a bid securing declaration must be completed and signed by the bidder, not later than 9:00 hours on the 30<sup>th</sup> day of March, 2021 at the National Procurement & Tender Administration Board, Ministry of Finance, 49 Main & Urquhart Streets, Georgetown.

Clarifications must be submitted in writing to the GEA's email address at <u>gea@gea.gov.gv</u> no later than one week prior to the deadline for bid submission.

- 5. Bids shall be valid for ninety (90) days after the date of bid opening.
- 6. Bids shall be opened by the National Procurement and Tender Administration Board in the presence of Bidders' representatives who wish to attend it at 9:00 hours on the 30th day of March 2021 at the address: 49 Main and Urquhart Streets, Georgetown
- 7. All Bidders are advised to attend a pre-bid meeting to be held on the "15" day of March, 2021 at 13:00hours via zoom, details of which will be provided to all bidders by the procuring entity

Representative of Procuring entity

MAHENDER SHARMA

# **INSTRUCTIONS TO BIDDERS**

#### A. Introduction

# 1. Description of the Procurement

The Procuring Entity identified in the *Bid Data Sheet* intends to procure the goods identified in the *Bid Data Sheet* and in the Schedule of Requirements.

# 2. Eligibility and Qualifications of Bidders

- 2.1 In order to be awarded a procurement contract, Bidders should possess the technical and financial capacity needed to perform the contract, should fulfill their tax and social insurance fund liabilities in Guyana, and should not currently be subject to a debarment penalty, and must comply with the specific eligibility and qualification requirements referred to in the *Bid Data Sheet and Evaluation Criteria*.
- 2.2 The bidders should not have conflicts of interest, including involvement in more than one bid in this proceeding, should not be associated nor have been associated in the past, directly or indirectly, with any agency or any of its representative(s), affiliate(s), that have been engaged by the Procuring Entity to provide consulting services at the preparation stage of the bidding documents, technical specifications and other documentation that are subject to be used in the procurement of goods which must be purchased in accordance with the Invitation for Bids. In case when the indicated facts are discovered, the Bidder's bid shall be rejected.

# **B.** Bidding Documents

# 3. Clarification and Amendment of Bidding Documents

- 3.1 The Procuring Entity, in not more than three (3) working days, will respond in writing or electronic mail to any request for clarification of the bidding documents to be received in writing or electronic mail not later than seven (7) days before the expiry of a deadline for submission of bids. At the same time, the Procuring Entity's response shall without identifying its source of the request, be distributed to all bidders who have received the bidding documents from the Procuring Entity.
- 3.2 At any time before the deadline for submission of bids, the Procuring Entity may amend the bidding documents by issuing an Addendum and notifying it to the bidders.

# C. Preparation of Bid

# 4. Language of Bid

- 4.1 The bid prepared by the Bidder, as well as all correspondence and documents related to that bid and exchanged by the Bidder and the Procuring Entity shall be written in the language specified in the Bid Data Sheet.
- 5. Documents Included in Bid

5.1 The bid prepared by the Bidder should contain the Form of Bid, the Price Schedules and the other documents to be submitted in accordance with these Instructions to Bidders, Bid Data Sheet and Evaluation Criteria.

#### 6. Bid Price

- 6.1. Subject to the choice of INCOTERMS as indicated in the Bid Data Sheet, the prices given in the Price Schedule shall include all transportation costs to the destination point indicated in the Contract, all taxes, duties, payments collected, in accordance with the laws of Guyana and delivery related and other costs on performing of contractual obligations.
- 6.2. The prices offered by the Bidders shall remain fixed during the whole period of Contract performance and shall not be modified in any circumstance.

# 7. Bid and Payment Currency

7.1 The prices shall be indicated in Guyana Dollars, unless otherwise specified in the *Bid Data Sheet*.

# 8. Bid Security

- 8.1 Unless otherwise provided in the *Bid Data Sheet*, the Bidder shall furnish, as part of his bid, an original Bid Security, in the form, currency and amount specified in the *Bid Data Sheet* with a validity period for not less than two (2) weeks upon the expiry of the bid validity period and in accordance with the specified form.
- 8.2 The bid security may be forfeited, if the Bidder:
  - (a) withdraws his/her bid after it is opened during the period of validity specified in the bid; or,
  - (b) having been awarded the contract fails:
    - (1) to sign the contract on the terms and conditions provided in his bid; or
    - (2) to furnish the Performance Security, if required to do so.

# 9. Period of Validity of Bid

9.1 Bids shall remain in force during the period specified in *the Bid Data Sheet* after the date of bid opening.

# 10. Format, Signing and Submission of Bid

10.1 The Bidder shall prepare an original bid which shall be completed in writing in indelible ink and shall be signed by the Bidder, or by the person (persons) duly authorized to sign the bid in accordance with the power of attorney and 2 (two) exact electronic PDF copies of the bid

- on Flash Drive, to be submitted with the bid. All pages of the bid where new information, modifications or erasures entered shall be initialed (signed) by the person or persons signing the bid. In the event of discrepancies between them, the original shall prevail.
- 10.2 The bid shall contain no interlineations, erasures or overwriting, except the cases when the Bidder needs to correct errors which must be initialed by the person or persons signing the bid.
- 10.3 The Bidder shall seal the original and Electronic PDF copies of the bid in different envelopes, marking them "ORIGINAL" and "COPIES", as appropriate. The envelopes shall then be sealed in an outer envelope.

# 10.4 The envelope shall:

- (a) be addressed to the Chairman, National Procurement & Tender Administration Board (NPTAB), Main & Urquhart Streets, Georgetown (the address specified in the Invitation for Bids);
- (b) bear the Name of the Project (Supply, Installation and Commissioning of Ten (10) 1.2 kWp Off-Grid Solar Photovoltaic Systems in Advent Acres, Loo Creek, Region 4) the words: "DO NOT OPEN BEFORE," ((9:00 hours on March 30, 2021).

#### 11. Deadline for Submission of Bids

11.1 Bids must be received by the Procuring Entity at the address and within the periods specified in *the Bid Data Sheet*. All bids received by the Procuring Entity upon the expiry of a period established for submission of bids as indicated by the Procuring Entity shall be rejected and returned to the Bidder unopened.

#### 12. Modification and Withdrawal of Bids

- 12.1 The Bidder may modify or withdraw his bid after the bid's submission, provided that the Procuring Entity will receive a written notice of modification, including substitution or withdrawal of bid until the expiry of established period for submission of bids.
- 12.2 The Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and sent in accordance with the provisions of ITB Clause 10. In that case the outer and inner envelopes will be additionally marked as "MODIFICATION" or "WITHDRAWAL", as appropriate. A withdrawal notice may also be sent by email with a subsequent written confirmation not later than the deadline for submission of bids.

# D. Opening and Evaluation of Bids

# 13. Opening of Bids

13.1 The Procuring Entity will open all bids in the presence of bidders' representatives who wish to attend, at the time, on the date, and at the address specified in the *Bid Data Sheet*. The

bidders' representatives who are present shall sign a register evidencing their attendance.

- 13.2 The bidders' names, bid prices, including alternatives (if alternatives permitted), information on the presence or absence of required bid security, information on the presence (absence) of tax debts and debts of social insurance payments will be announced at the opening. No bid shall be rejected at the opening, exclusive of late bids and unidentified Bids to be returned to the Bidder unopened.
- 13.3 Bids and modifications sent pursuant to ITB Clause 12.2 that are not opened and read out during the bid opening shall not be accepted for further evaluation, regardless of circumstances.

#### 14. Evaluation of Bids

- 14.1 During the evaluation of bids, the Procuring Entity may, at his discretion, request the Bidder to provide clarification of his bid. The request for clarification and the response thereto shall be made in writing, and in that case no change in price or substance of the bid shall be sought, offered, or permitted.
- 14.2 The Procuring Entity shall determine the responsiveness of each bid to requirements of the bidding documents. For the purposes of this Clause a substantially responsive bid is one which satisfies all the indicated provisions without a material deviation or reservation.
- 14.3 The Procuring Entity may regard a tender as responsive if it contains any minor deviations, that do not materially alter or depart from the characteristics, terms and conditions and other requirements of the bid solicitation documents, or if it contains errors or over sights that are capable of being corrected without touching the substance of the tender. To the extent feasible and appropriate, for the purposes of comparing bids, acceptable deviations shall be quantified in monetary terms, and reflected in adjustments to the bid price (for the purposes only of comparison of bids).
- 14.4 Arithmetical errors shall be rectified in the following manner. 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. If there is a discrepancy between words and figures, the amount in words shall prevail. If the Bidder disagrees with such correction of errors, his bid shall be rejected.
- 14.5 The Procuring Entity shall evaluate and compare only the bids that are determined to be responsive to the Bid Solicitation Document.

#### 15. Confidentiality and Contacting the Procuring Entity

- 15.1 No Bidder shall contact the Procuring Entity on any matter related to his bid from the date of bid opening until the date of contract award, except for requests related to clarification of the bid. Information concerning the evaluation of bids is confidential.
- Any effort by the Bidder to influence the Procuring Entity's decision on bid evaluation and comparison, or contract award may result in the rejection of that Bidder's bid and

subjected to debarment in accordance with: Regulation 3(1)(b) of the Procurement (suspension and debarment) Regulations 2019

### E. Award of Contract

#### 16. Award Criteria

- 16.1 Subject to ITB Clause 18, the Procuring Entity will award the Contract to the Bidder whose bid is determined to be substantially responsive to the requirements of the bid solicitation document, and who offered the Lowest Evaluated Bid, provided that the Bidder has been determined:
  - (a) to be eligible pursuant to Clause 2;
  - (b) to comply with qualification requirements, in accordance with Clause 2, and any technical requirements and evaluation criteria disclosed in the bid solicitation documents.

# 17. Procuring Entity's Right to Vary Quantities at Time of Entering into a Contract

17.1 The Procuring Entity reserves the right, when entering into a contract, to increase or decrease the quantity of goods and related services specified in the Schedule of Requirements, by the percentage indicated in the *Bid Data Sheet*, no change in the unit price or other conditions shall be made (an increase of quantity not exceeding 10 percent variation)

# 18. Procuring Entity's Right to Accept Any Bid and to Reject All Bids

18.1 The Procuring Entity reserves the right to accept or reject any bid or all bids, and to cancel the bidding process at any time prior to award of contract, without thereby incurring any liability to Bidders and without being required to inform the Bidder or Bidders of reasons of such actions.

#### 19. Notification of Award

- 19.1. The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the bid validity period.
- 19.2. The notice of acceptance shall be given to the successful bidder within fourteen (14) days of the award of contract.
- 19.3. At the same time that the Procuring Entity notifies the successful Bidder in accordance with sub-clause (1), the Procuring Entity will notify all other Bidders of the name of successful Bidder, and his bid price.

# 20. Signing of Contract and Performance Security

20.1 The Procuring Entity will send the successful Bidder the Form of Contract contained in the bid solicitation document. The successful Bidder shall sign and date the Contract and return it to the Procuring Entity within seven (7) days of receipt of notice of award.

- 20.2 Together with the signed Contract, the Bidder shall, if required to do so by the *Bid Data Sheet*, furnish the Procuring Entity with a Performance Security in the amount and form specified in the *Bid Data Sheet*.
- 20.3 If the successful Bidder fails to furnish the performance security, if required to do so, or within 7 (seven) days fails to return the Contract signed by him, then it shall be a sufficient ground to refuse the award of Contract, and to forfeit the bid security. In that case the Procuring Entity shall award the Contract to the next lowest evaluated Bidder, subject to the right of the Procuring Entity to reject all bids.

# 21. Settlement of Disputes

21.1 To settle the disputes which may arise during the execution of Contract, the parties shall follow the procedure referred to in the *Bid Data Sheet*.

# 22. Corrupt and Fraudulent Practices

- 22.1 The Procuring Entity requires that Bidders observe the highest standards of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Procuring Entity:
  - (a) will reject the bid if it establishes that the Bidder recommended for award has engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract in question.
  - (b) refer the matter to the Public Procurement Commission (PPC) in accordance with the provisions of Procurement (Suspension and Debarment) Regulations 2019.

# 23. Compliances

23.1 Bidder must submit valid certificates of compliances from Guyana Revenue Authority (GRA), National Insurance Scheme (NIS), and VAT registration (where applicable).

# 24. Defects Liability:

24.1 The "Defects Liability Period" for the goods and related services is six (6) months from the date of taking over possession or such other period as may be specified in the Bid Data Sheet. During this period, the supplier will be responsible for rectifying any defects or replacement of goods free of cost to the Procuring Entity.

# **BID DATA SHEET (BDS)**

The following specific data to clauses of the provisions of Instructions to Bidders which supplement or amend the provisions of the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

Item No.	
ITB 1.1	Guyana Energy Agency, 295 Quamina Street, South Cummingsburg, Georgetown, tel:226-0394, gea@gea.gov.gy
	The subject of the procurement is: Supply, Installation and Commissioning of Ten (10) 1.2 kWp Off-Grid Solar Photovoltaic Systems in Advent Acres, Loo Creek, Region 4
ITB 2.1	To qualify for award of the Contract, the bidders shall meet the qualification requirements set out in the evaluation criteria:
ITB 4.1	Language of Bid shall be <b>English</b> Language All submission must be in <b>English</b> or translated to English if different. Such translations must be signed and stamped by a registered translator or embassy or consulate
TTB 5.1	<ol> <li>The Bidder shall submit the following additional documents in its bid:</li> <li>Evidence of Financial Capability in the amount of 30% of the tendered sum in the form of a bank statement as at January 2021 or letter of credit from a commercial bank in the name of the bidder. Letter of Credit must state a figure. The letter of credit must be dated within one month of the bid opening date and be clearly legible. When a photocopy of the letter of credit or bank statement is presented, it must be certified a "true copy of the original' by the issuing company;</li> <li>Submission of a valid business registration or certificate of incorporation, inclusive of list of directors, that is clearly legible. Where bidder is part of an unincorporated joint venture, a legible copy of joint venture agreement is required. Copy of joint venture agreement must state the joint venture partner to which invoice will be paid and contract to be signed. Where bidder is a joint venture company, a legible copy of certificate of incorporation is to be submitted. Each party must submit valid compliance as per items 2 and 3 of the Evaluation Criteria;</li> <li>Written confirmation of authorizing signatory must be provided. For the incorporated company this must be in the form of a Power of Attorney endorsed by a Commissioner of Oaths or Justice of Peace. For a registered business that has appointed an employee to sign the bid, a letter of authorizing signatory must be provided;</li> <li>Valid certificates of compliance from GRA and NIS and VAT registration (only applicable to Bidders resident in the country of the Procuring Entity);</li> <li>Completed litigation form on page 45 of the bidding documents;</li> <li>A letter stating any or no termination or abandonment of projects. The letter must be dated within one month of the bid opening date;</li> <li>Provide documentary evidence that the PV modules comply with IEC 61215 &amp; IEC 62804 for Crystalline Silicon PV Modules (or equivalent) standards, and th</li></ol>

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	the inverters are UL 1741 listed;  Provide documentary evidence to demonstrate that the Goods offered meet all the technical specifications of the bidding document. Technical literature must include data sheets and specific technical information on each of the items of equipment and components proposed for the photovoltaic system;  10. A detailed schematic design layout for the system (schematic should be NEC 2017 Compliant), including explanatory notes for sizing of equipment and components that comprise the system, and energy production calculations using a PV modelling software;  11. Certificates of product quality (modules and inverters) issued by a recognized laboratory accredited by the International Laboratory Accreditation Cooperation (ILAC) and which must be valid up to the date of commissioning of the system;  12. Documentary evidence that batteries (if applicable) comply with IEC 61427:1999 and the manufacturing process conformed to environmental management standard ISO 14001;  13. An implementation schedule indicating important milestones such as equipment delivery to site, installation, testing and commissioning. Frequent progress reports and work plan are to be provided to the procuring entity as required by the procuring entity during project execution;  14. Bidder must provide audited financial statements for the past three years for incorporated companies. Financial statements must be audited by a Chartered accountant/accountancy firm and include an auditor's note.  OR  Registered businesses must provide Balance Sheets, Profit and Loss Accounts, and Income and Expenditure Accounts for the past three years. These financial statements must be approved by a Chartered accountant/accountancy firm.
ITB 6.1	The price quoted by bidders shall be on the basis of CIF to port Georgetown for goods delivered to Guyana including cost for transport to the site (Advent Acres, Loo Creek, Region 4)
ITB 7.1	Currency of Bid shall be in Guyana Dollars
ITB 8.1	If bid amount is below G\$15m, a bid securing declaration must be completed and signed by the bidder. However, if bid amount is G\$15m and above, a bid security of two percent (2%) of the tendered sum is required in the form of a Bank guarantee or a bond from an Insurance company licensed by the Bank of Guyana.
ITB 9.1	The period of validity of bid ninety (90) days.
ITB 11.1	Deadline and place for submission of bids at 9:00 hours on the 30 <sup>th</sup> day of March 2021 at the address: The National Procurement & Tender Administration Board, Ministry of Finance, Main & Urquhart Streets, Georgetown, Guyana
ITB 13.1	Time and place for opening of bid: 9:00 hours on March 30, 2021, at The National Procurement & Tender Administration Board, Ministry of Finance, Main & Urquhart Streets, Georgetown, Guyana

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ITB 17.1	Increase or decrease in the quantity of goods and services not exceeding 10% in accordance with ITB Clause 17.1
ITB 20.2	The amount of the performance security is 10% of the contract price. Performance Security must be in the form of a Bank Guarantee or a bond from an Insurance company licensed by the Bank of Guyana. This shall be valid for the duration of the contract period.
ITB 21.1	Disputes that may arise in the performance of the contract shall be settled in accordance with the applicable Laws of Guyana.
ITB 24.1	The duration of the defect's liability period is six (6) months following provisional acceptance.

# GENERAL CONDITIONS OF CONTRACT (GCC)

The General Conditions are the Standard General Conditions of Contract. No alteration shall be made on the pages of these Conditions. The Procuring Entity, when amending or supplementing the General Conditions of Contract should do so only in the Special Conditions of Contract. Any amendment or addenda of the General Conditions of Contract shall conform to the legislation of Guyana.

# 1. Definitions and application

- 1.1 This Contract lists below the terms that have the following interpretation:
  - (a) "Contract" means the agreement entered into between the Procuring Entity and the Supplier, as recorded in the Form of Contract signed by the parties, including all attachments and appendices thereto and all the documents referenced therein.
  - (b) "Contract Price" means the price payable to the Supplier under the Contract for complete and proper performance of his contractual obligations.
  - (c) "Goods" means the item (s) referred to in the Schedule of Requirements contained in the Bid Solicitation Document.
  - (d) "GCC" means the General Conditions of Contract contained in this Section.
  - (e) "SCC" means the Special Conditions of Contract.
  - (f) "Procuring Entity" means the Procuring entity carrying out the procurement of Goods, specified in the SCC.
  - (g) "Supplier" means an individual or legal entity, or a combination of any abovementioned forms which operate under the existing agreement as a joint venture and supply the Goods and Services under the Contract.
  - (h) "Day" –means calendar day.
- 1.2 The General Conditions of Contract shall apply in the procurement of goods; the specific amendment, addition and alteration shall be indicated in the Special Conditions of Contract.
- 1.3 Warranty requirements are as may be specified in the Special Conditions of Contract.

# 2. Contract Documents

2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The contract shall be read as a whole.

# 3. Performance Security

3.1 If required by the SCC, within seven (7) days of receipt of notification of award, the successful Bidder shall furnish the Procuring Entity with the performance security the amount and form of which are indicated in the SCC.

# 4. Packing

4.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to final destination specified in the Contract, and as may be required by the Special Conditions of Contract.

# 5. Delivery, Transportation, Mobilization Advance

5.1 The Supplier must deliver the Goods within the periods and to the Destination point indicated in the Schedule of Requirements and shall provide the documentation indicated in the SCC. Subject to the SCC, transportation of the Goods to the place specified by the Procuring Entity shall be carried out and paid by the Supplier and related costs shall be included in the Contract Price.

# 6. Payment

- 6.1 The payment to the Supplier for the Goods delivered shall be made in accordance with the Contract in the form and within the periods specified in the SCC.
- 6.2 If the Procuring Entity does not pay the Supplier the sum due within the periods specified in the Contract, in that case the Procuring Entity shall pay the Supplier [interest at the rate specified or determined pursuant to the Special Conditions of Contract].

# 7. Prices

7.1 Prices established by the Supplier in the Contract for goods delivered shall not vary from the prices quoted by the Supplier in his bid.

# 8. Assignment

8.1 The Supplier shall not assign, in whole or in part, his obligations under the Contract to a third party for the execution without the Procuring Entity's prior written consent.

# 9. Delays in the Supplier's Performance and liquidated damages

- 9.1 Delivery of the Goods shall be carried out by the Supplier, in accordance with the schedule indicated by the Procuring Entity in the Schedule of Requirements.
- 9.2 Except for provided under GCC Clause 13, the delay in the Supplier's performance of his delivery obligations shall render the Supplier liable for payment of liquidated damages in the amount specified in the SCC, unless an extension of time is agreed upon by the parties without application of liquidated damages. Once the maximum deduction specified in the

SCC is reached, the Procuring Entity may consider termination of the Contract, in accordance with Clause 10 of the General Conditions of Contract.

#### 10. Termination

- 10.1 The Procuring Entity, without detriment to any other sanctions of infringement of the provisions of Contract, by written notice of default sent to the Supplier, may terminate this Contract in whole or in part:
  - (a) if the Supplier fails to deliver the portion or all of the Goods within the periods provided for in the Contract, or within an extension period of that Contract, or to perform any of his obligations under the Contract.
  - (b) if bankruptcy procedures are applied to the Supplier, or it is declared insolvent.
  - (c) if the Supplier, in the Procuring Entity's opinion, has engaged in corrupt, fraudulent, collusive or coercive practices when entering into or executing the Contract.
  - (d) If the Procuring Entity deems that continued implementation of the contract would no longer be expedient from the standpoint of the public interest.
- 10.2 The notice of termination shall specify the reason of termination, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- 10.3 Notwithstanding clauses 9 and 10.1(d), the Supplier shall not forfeit his performance security, and shall not be liable for payment of liquidated damages, or termination for default, if delay in executing the Contract or failure to perform obligations under the Contract is the result of an event of force majeure. When force majeure arises, the Supplier shall promptly notify the Procuring Entity in writing of such circumstance and its causes.
- 10.4 When the contract is terminated in accordance with clause 10.1(d), the Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Procuring Entity at the Contract terms and prices. For the remaining Goods, the Procuring Entity may elect:
  - (a) to have any portion completed and delivered at the Contract terms and prices; and/or
  - (b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.

#### 11. Settlement of Disputes

11.1 If any dispute or disagreement arises between the Procuring Entity and the Supplier for the Contract or in connection with it, the parties shall make every effort to resolve the dispute

or disagreement amicably by mutual consultation.

11.2 If during twenty one (21) days, the parties failed to resolve their dispute or disagreement by mutual consultation; either the Procuring Entity or the Supplier may send the other party the notice of intent to commence arbitration, if an arbitration is incorporated in the Contract in the Special Conditions of Contract or otherwise agreed by the parties, or in the Court of General Jurisdiction if no arbitration is envisaged, and no arbitration or litigation in respect of that matter may be commenced unless such notice is given.

Any dispute or disagreement in respect of which the notice of intent is sent to commence trial shall be heard by the [Court of General Jurisdiction].

11.3 Notwithstanding any reference to dispute settlement herein, the parties shall continue to perform their obligations under the Contract, unless they agree otherwise.

# 12. Applicable Law

12.1 The Contract shall be interpreted in accordance with the Laws of Guyana.

# 13. Formal Communication between the Procuring Entity and the Supplier

- Any notice given by one party to the other pursuant to the Contract shall be in force if it is done in writing and sent at the address of other party in the SCC.
- 13.2 A notice shall be effective when delivered or on the specified date, whichever is later.

#### 14. Taxes and Duties

14.1 The Supplier shall be fully responsible for all taxes, duties, license taxes, etc., levied in accordance with the legislation of Guyana, and subject to the application of INCOTERMS in accordance with the SCC.

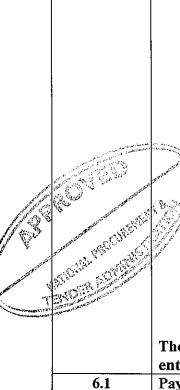
#### 15. Retention

- 15.1 No retention shall be applied on consumables, but warranties, guarantees and expiry dates to apply.
- 15.2 Retention on fixed assets shall be determined by the procuring entity on a case-by-case basis.

# SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract.

GCC Clause	Special Conditions of Contract
1.1	Definitions The Procuring Entity is Guyana Energy Agency, 295 Quamina Street, South Cummingsburg, Georgetown, tel:226-0394, Fax:226-5227, gea@gea.gov.gy.  The Supplier is  (indicate full name, legal address, phone, fax and e-mail of
	Supplier) The Subject of procurement Supply, Installation and Commissioning of ten (10) 1.2 kWp Off-Grid Solar Photovoltaic Systems in Advent Acres, Loo Creek, Region 4
	Warranty The supplier warrants all Goods supplied under the contract are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the contract. The supplier further warrants that all Goods supplied under this contract shall have no defect, arising from design, materials or workmanship or from any act or omission of the supplier that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.
	36 months complete system warranty is applicable from provisional acceptance date. A final completion certificate shall be issued upon satisfactory commissioning of the systems.
3.1	Performance Security  The amount and form of Performance Security is: 10% of the contract price in the form of a Bank Guarantee or a bond from an Insurance company licensed by the Bank of Guyana. The bond shall be valid for the entirety of the contract period.
4.1	Packing The Supplier shall provide such packing of the Goods as is required to prevent damage or deterioration during transit to final destination, as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit.
5.1	Delivery, Transportation
	The following documentation is to be provided by the Supplier to the Procuring Entity:  (1) Copies of Supplier's invoice indicating a description, quantity, unit price of the Goods and sum total.



- (2) shipping order, railway receipt or truck receipt.
- (3) Warranty certificate of Manufacturer or Supplier;
- (4) Inspection certificate issued by the authorized inspection service, and the supplier's factory inspection report (if any);
- (5) Certificate of origin;
- (6) Certificate of conformity
- (7) Certificate of Quality
- (8) Two copies of packing list identifying contents of each package, and clearly showing shipping marks, package numbers, kind of package, contents, dimensions and gross weight of each package in kilos;
- (9) Full set of ocean on-board bills of lading.

# The costs of delivery shall be at the Supplier's own expense. The procuring entity will not be responsible for customs clearance of the goods.

# **Payment**

- (a) Ten percent (10%) of the contract price within 14 days of signing the contract and the submission of the performance bond.
- (b) Thirty percent (30%) of the contract price upon physical verification by the procuring entity that major components such as PV panel mounts, PV modules, inverters and batteries (if applicable) have been installed by the supplier and have complied with the technical specifications.
- (c) Fifty percent (50%) of the contract price upon acceptance of the system by the procuring entity.
- (d) Ten percent (10%) of the contract price upon expiry of the defects liability period barring the correction of defects.

# Withholding tax deductions shall be as follows:

# (a) For resident contractors:

Each payment of G\$500,000 and above shall be subject to a withholding tax of 2% on every payment. The GEA shall provide the contractor with a certificate/statement of the gross amount of the payment received and the amount of tax deducted.

# (b) For non-resident contractors:

Withholding tax shall be deducted at a rate of 20% on gross earnings, except for contractors from Canada, United Kingdom and CARICOM which have the Double Taxation Relief Order with Guyana. In such cases, the relevant rates of withholding taxes are applicable.

9.2	Liquidated Damages Applicable rate: 0.05% for untimely execution of order. Maximum deduction: 10% of the delayed works/delivery.
11.2	Settlement of Disputes Disputes arising out of or in connection with the Contract shall be settled in accordance with the Laws of Guyana.
ID INE	Taxes and Duties The version edition of INCOTERMS shall be: 2010

# DELIVERY SCHEDULE / SCHEDULE OF REQUIREMENTS

The delivery schedule expressed as days specifies hereafter the date of delivery to destination point. In column "the delivery schedule", the Procuring Entity shall indicate the date from which schedule starts. It should be either the date of award, or the date of signing of Contract, or the date of opening of letter of credit, or the date of confirming the letter of credit (subject to circumstances). The Form of Bid shall specify only reference to that schedule.

Item No.	Brief Description of Goods		Place of Delivery	Procuring Entity's	1	's Offered ion Schedule
A State of the sta				Completion Schedule	Earliest Delivery	Latest Delivery
				(days as of signing of the contract		
	Supply, Installation and Commissioning of Ten (10) 1.2 kWp Off-Grid Solar Photovoltaic Systems in Advent Acres, Loo Creek, Region 4	10	Advent Acres, Loo Creek	90 days		
	PV module					
	Mounting structure:	To be determined				
	Inverter	by bidder				
	Charge Controller					
	Batteries					
	Web-based energy monitoring system					
	Cabling and miscellaneous					
	Fire Extinguisher					
	Installation and commissioning materials for PV system (including all materials/components		3			
	required for interconnection to on-site)	:				

#### TECHNICAL SPECIFICATIONS

#### 1. General

The tender calling for convenient bids is dedicated to identifying and contracting a Supplier and Installer for the following services:

- 1.1 Supplying, installing and commissioning of Ten (10) 1.2kWp Off-Grid Solar Photovoltaic Systems and Ten (10) 6kWh Battery Energy Storage Systems in Advent Acres, Loo Creek;
- 1.2 Provide all technical documentations including user and operational manuals to the GEA.

The bidder must include all brochures, certifications, technical specifications, brand, and models of ALL equipment provided in one location in their submission in the following order.

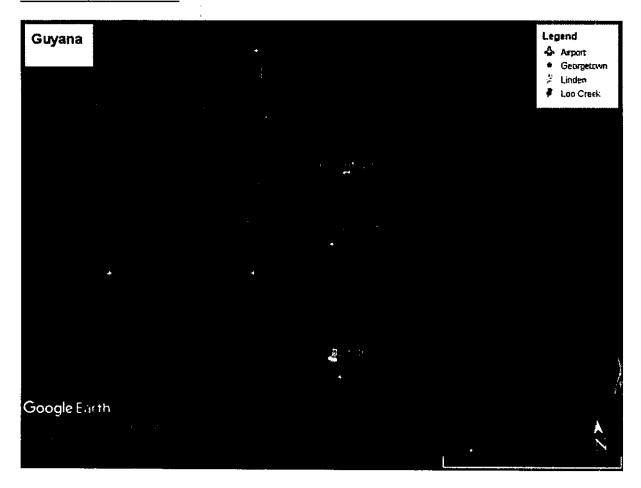
- 1. PV modules
- 2. PV Array Mounting Structure
- 3. Off-Grid Inverter
- 4. Charge Controller
- 5. Hybrid Inverter (if any)
- 6. Battery Energy Storage System
- 7. Energy Monitoring System
- 8. Schematic Diagram in accordance with NEC 2014 Article 690 and NEC 705
- 1.3 Bidders must ensure that all equipment supplied under the contract is new, unused and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- 1.4 Provide 3 years after sales services to GEA. Bidders must provide a statement indicating its acceptance or otherwise of this requirement.

## 2. Climate and Site Conditions

Altitude	:<1000m above sea-level
Maximum daily mean temperature	: 35° C
Maximum outdoor ambient shade temperature	: 50° C
Minimum outdoor ambient shade temperature	: 15° C
Maximum relative humidity	: 100%
Wind Velocity	: 18 mph
Isokeraunic level	:70
Average Number of days with Rain p.a.	:120
Average Annual rainfall, cm	:150



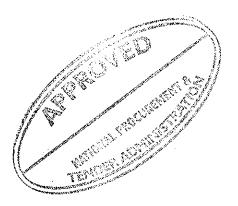
# Loo Creek, Advent Acres



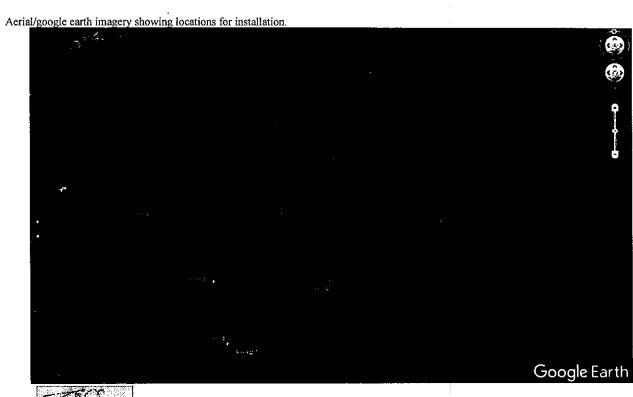
# 3. Existing Power Supply Conditions

Bidders are required to visit the site to determine appropriate inverter(s) selection and obtain any other information required to prepare their bids.





Goods and Related Services (Valued GS7M to G\$15M)



### 4. Specification of Required Hardware

# 4.1 General Remark

It is pointed out that the whole system should be designed in such a way that all components are resistant to climate conditions of the specific sites, specifically against corrosion. Special attention should be made in the equipment selection in such a way that the risk of theft and vandalism is minimized. Bolts and nuts of the PV arrays should be affixed in such a way that theft is minimized.

#### 4.2 Photovoltaic Modules

- PV modules should be in accordance with international standards (IEC 61215, IEC 61730, IEC 61701, IEC 62804, UL1703 etc.) and the National Electrical Code 2014 Article 690;
- 260 watts or greater rated solar modules totaling 1.28kWp
- All modules should be made of crystalline silicon solar cells
- All PV modules shall show the same capacity
- The Manufacturer should be internationally recognised and provide references and certificates on module testing.
- MC4 connectors for all Modules
- 20 years warranty on Modules

# 4.3 Ground Mounting Structure for PV Modules

- The mounting structure is ground mounted.
- The PV modules mounting structure must accommodate the PV modules supplied.
- The PV array mounting structure, including modules, and balance of system components shall be designed to withstand wind loads of at least 60 mph (3-second gust).
- Array mounting hardware supplied shall be compatible with the site considerations and
  the environment. Mounting structures of anodised aluminium material shall be provided.
  Mechanical hardware shall be durable and corrosion resistant. The use of ferrous metals
  (including but not limited to painted or plated steel), dissimilar metals in contact, or any
  wood or plastic components is not allowed.
- Special attention shall be paid to minimising the risk from exposed fasteners, sharp edges, and potential damage to the modules or support structure. All potentially hazardous hardware must be protected or shielded for safety.
- PV modules must be oriented in a southern direction with an inclination of between 8 to 10 degrees.
- The mounting structure must be able to absorb and transfer the mechanical loads to the ground via the foundation. Thus, the foundation should adhere to the following:

#### Foundation works

- Structural concrete @ 3000 psi or over at 28 days, using -3/4 stones with a height of not less than 16 inches.
- ½" diameter corrugated high tensile steel reinforcement or over (main bars) and 3/8" diameter steel bars as stirrups spaced at 8" crs to form a cage with a minimum of 2" concrete covers.
- Vertically smooth finish formwork for the sides of the foundation.
- Compacted sand fill of 12" or more in two layers under foundation.
- 2" thick cement/ sand (1:6) mix blinding upon compacted sand fill before pouring concrete

Array mounting hardware supplied shall be compatible with the site considerations and
the environment. Mounting structures of anodized aluminum material shall be provided.
Mechanical hardware shall be durable and corrosion resistant. The use of ferrous metals
(including but not limited to painted or plated steel), dissimilar metals in contact, or any
wood or plastic components are not allowed.

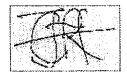
Special attention shall be paid to minimizing the risk from exposed fasteners, sharp edges, and potential damage to the modules or support structure. All potentially hazardous hardware must be protected or shielded for safety.

# Off Grid Inverters

- The minimum size of each Inverter shall be 1.5 kW or above.
- Master/Slave or String type
- Off-Grid Voltage 110/220Vac
  - Operating Frequency range: Frequency Range ≥ 58.4 to ≤ 61.7 (Field Selectable)
    Certificates and Compliance with International Standards Including (UL 1741-2010, UL 1699B, IEEE 1547-2003, IEEE 1547.1-2003, ANSI/IEEE C62.41, FCC Part 15 A & B)
- Pure Sinewave output;
- High efficiency (AC) > 90% @ P/Pn (AC) = 10%;
- Protection against overcurrent and overvoltage;
- Indications of status of operation (e.g. LED);
- · Capability of connecting monitoring devices;
- Ground fault monitoring / grid monitoring.
- Safety measures (EN 61000, EN 60950and others).
- Switchboard including manual disconnection device.
- Ten years' warranty

#### 4.5 **Hybrid Inverter (if any)**

- Minimum capacity of 1.5 kW
- Master/ Slave or String Type;
- Maximum efficiency of 96% with 94.5% CEC efficiency;
- Intelligent battery management including state of charge calculation for maximum battery life;
- Integrated soft start/generator support;
- Versatile complete for off-grid management as well as grid-tie battery backup/AC Coupling;
- Suitable for systems from 1.5 to 3 kW;
- Excellent overload characteristics with active temperature management;
- Five-Year Standard Warranty;
- Certification UL 1741 / UL 1998;
- Modular, stackable design;
- Nominal Frequency 60 Hz;
- Frequency Range  $\geq$  58.4 to  $\leq$  61.7 (Field Selectable);
- · Pure Sine Wave;
- Automatically transfers between inverter power and incoming AC power source;
- Compatible battery types Flooded, Gel, AGM, LiON;
- Indications of status of operation (e.g. LED);
- Over voltage and under voltage protection;
- Over-temperature protection;
- Overload protection;



- Short circuit protection.
- Five-Year Standard Warranty;

#### **Energy Storage System (Lithium Technology)** 4.6

- Minimum Energy Storage capacity of 6 kWh
- Batteries should be deep cycle type and rechargeable;
- Lithium Ion/Iron technology;
- Capable of 80% depth of Discharge
- Design for renewable energy applications;
- Batteries are to be placed on racks to minimize the use of space;
- Bidders are to supply the racks which must be made of **metal**. Bidders are to supply the racks which are to be fully fabricated from metal and resistant to rust. Racks should be made to minimize the space required to store the batteries and allowance for effective ventilation. Welding, bolts and nuts used must be resistant to rust. Racks must be painted in two coats with anti-rust protective layer paint. The preferred color would be black. The battery racks MUST be adequately grounded.
- Bidders are to supply drawings of the racks with battery bank configuration;
- Minimum battery size is 300 Amp-Hour; C10
- Manufacturer's data sheets containing battery performance specifications must be procured from same makes ampere-Hour and voltage rating;
  - 6 years' warranty on batteries;
  - 4,000 and above cycles at 80% depth of discharge
  - Standards to be conformed to:
    - o UL 1989
    - o IEC 61427:1999
    - o UL 2054
    - o Manufacturing process must have conformed to environmental management standard ISO 14001.

The battery energy storage system should provide the primary function of allowing the maximum use of energy stored during the periods when solar energy is not available. It should be capable of providing rapid response when the intermittent source cannot meet the energy requirement of the building. A battery management/monitoring system must be included.

#### 4.7 **Energy Management System**

The energy storage management system shall be capable of (but not limited to) the following:

- State of Charge (SOC) management/tracking
- PV curtailment
- Charging and discharge rates
- ESS monitoring (power, voltages, current, etc.)
- Active/Reactive power input/output
- Active/Reactive power import/export limiting
- Frequency response capable
- Data logging
- 1 year Warranty



# Schematic Diagram

A detailed system schematic design layout of all components and how they interconnect with each other MUST be provided in accordance with NEC 2014 Article 690. Drawings provided MUST be electrical schematic drawings and show all components and their respective rating (e.g. wires and circuit breaker sizes). The contractor is responsible for all interconnections, including the connection of all the buildings to the PV system. This should be done through a mini-grid configuration. All the hardware required for species of the provided by the contractor.

The contractor is required to have a laminated copy of the system schematic installed at the location where the system components are sited.

# 4.9 Cabling

Cables exposed to the sun should show an adequate type designed to withstand harsh weather conditions (UV radiation, salty humidity etc.), e.g. type HN07-RNF and cables must be clearly identifiable (colour coded).

- Appropriate length USE-2 #10 AWG Sunlight Resistant Cable to connect solar panels in the designed configuration.
- The appropriate number of Solar Disconnect Switches and Combiner boxes.
- Appropriate size and number of interconnecting cables between combiner boxes and
  inverters. The distance from the combiner boxes to the inverters is decided upon visits
  to the sites.
- Appropriate size AC Interconnecting cables. The distance from the sites of the inverters to the main switchgear is to be **decided upon visits to the sites** by the Bidder.
- Appropriate size cables for electrical distribution network at the site.
- Power cables, communication cables & control cables of armoured and Solar grade

### 4.10 Monitoring System

The installation shall provide real-time **web-based** electric energy meter, power Meter, data logger and appropriate current transformers to record electric consumption of the building from the solar energy produced by the solar PV system and also provide a combined recording of all inverters/circuits loads. It should provide:

- Graphical and Numerical real-time energy information and long-term reports (total power demand of the building including from the utility (if any) and solar, total energy consumption of the building from the utility (if any) and solar, total power generated by the solar system, total energy produced by the solar system, net energy, avoided carbon dioxide emissions);
- Historic Data;
   Data export via push or pull with an open data API.
- No service contracts
- Warranty 2 years
- Must have at least one (1) ethernet styled registered jack (RJ) 45 data port.

# 4.11 Charge Controller

- Charge controller must be rated 25 % over system capacity size
- Nominal Battery voltage: 12/24/48 V
- Maximum Power Point Tracking (MPPT) charging technology
- Charge regulation method: Three stage (bulk, absorption, float) plus manual equalization



- Available monitoring and configuration
- Supported battery types: Flooded, GEL, AGM, Custom
- Compatible with any brand of PV module, any grounding method
- Stand-alone application or integration with inverter charger system
- Certification: UL1741, CSA 107.1, EN 50178/IEC 62477-1
- 5 years Warranty

#### 4.12 Fire Extinguisher

- Can be of type: Carbon Dioxide, Dry Chemical, Clean Agent or Dry Powder
- 20 pounds (lbs.)
- Class C rated
- Operation type (P.A.S.S)

# 5. Specification of Required Services

#### 5.1 Systems Design

Bidders are required to visit the selected sites and determine the best possible locations for the complete systems, voltage and phase requirements for inverters and to become acquainted with the sites for the installation of the systems. A detailed schematic diagram is required, showing system layout and include all interconnection equipment and points of connection for DC, AC, lightning and grounding protection.

The successful bidder shall be required to provide all necessary infrastructure for mounting/positioning the solar modules, inverters, controllers, energy storage system, switch gears and busbars. All infrastructure constructed must be structurally sound, secure and provide protection and adequate ventilation for the equipment installed.

The successful bidder is also responsible for connecting each building to the installed solar PV system. The end user voltage should be 110/220Vac.

# 5.2 System Operation

- a) The system must be configured in an AC or DC coupled configuration or a combination of the two. The solar PV system shall be the primary source of energy for the buildings.
- b) Electricity generated from the PV arrays shall be used for real-time consumption, and recharging of the battery energy storage system.
- c) The battery energy storage system should provide the primary function of allowing the maximum use of energy stored during the periods when solar energy is not available (at nights). It should be capable of providing rapid response when the intermittent source cannot meet the energy requirement of the consumers.
- d) The PV system should be capable of power generation scheduling for specified or predetermined periods of the day. Thus, the daily operation of the PV system shall be automated to turn ON and OFF power based on a predetermined schedule.

#### 5.3 Installation

a) All installations are to be conducted in accordance with NEC 2014 Article 690 which covers solar PV systems installation, protection (AC, DC and lightning) and grounding, Chapter 3 of the NEC 2014 which covers wiring method and materials, and Article 705 for interconnection to the grid. The Contractor is required to connect the PV system



in an off-grid configuration. All labels/ markings are to be provided by the contactor in accordance with the NEC 2014 Article 690 requirements.

- b) The Government Electrical Inspectorate (GEI) requires that all solar installations must be provided with effective independent grounding/earthing systems. The contractor is therefore required to install a separate grounding rod that when tested has ground resistance value of 25 ohms or less. The minimum size copper grounding rod to be use is 5/8 inch x 8 feet for the solar PV installation.
- The GEV also requires that the contractor applies and pay for an independent inspection certificate of all completed installations. This inspection certificate is required by the GEA before a final completion certificate could be issued.
- d) The contractor is responsible for ensuring that the monitoring system is connected via wireless fidelity (Wi-Fi) or cable to the existing network of the building (if any). All materials required for this task must be provided by the contractor.
- e) For all hybrid inverter installation, a main circuit breaker 1.25 times the size of the rated output (kW) of the Hybrid inverters is required to be supplied and installed near the existing electrical distribution panels of the building.
- f) Damages to internal and external walls e.g. any holes, cuts or any actions/activities resulting in the defacing of the building during installation, must be repaired (neatly covered with appropriate moulding, paint or filling material) and returned to the original state at the expense of the contractor.
- g) The contractor is also responsible for interconnecting the inverter/hybrid inverter for systems featuring energy storage to the electrical distribution supply at the building. All materials required for this task must be provided by the contractor.

#### 5.4 Delivery of Equipment to Installation Sites

The Bidder is fully responsible for organising and guaranteeing timely delivery and transport of the equipment to the installation site.

The Bidder is requested to present detailed information on the schedule of delivery and transport modalities of the equipment to the project site. Close coordination with responsible staff from the procuring entity is recommended. The Bidder is requested to consider site conditions having a potential influence on delivery and installation.

#### 5.5 Transfer of Ownership

An Acceptance Inspection will be organised by the procuring entity and in presence of the Seller will allow for the issuance of a certificate to transfer ownership to the Purchaser.

#### 5.6 Warranty

Two types of warranty have to be offered by the Bidder:

- a) Warranty on hardware failures on all products offered and used according to international established terms;
- b) Warranty on the proper operation of the provided equipment according to the specification and terms fixed in the contract between the Seller and the procuring entity.

#### 5.7 After Sales Service

The Seller must provide a local after-sales service of no less than 3 years.

### 5.8 Commissioning

Commissioning refers to inspection and testing the solar PV system after installation and certifying that it operates as expected and is installed according to the design plans and complies with NEC 2014 Articles 690 and 705.

# 5.9 Defects Liability

The defects liability period for the goods and related services is 6 months following provisional acceptance of the system. During this period, the contractor will be responsible for rectifying any defects free of cost to the Procuring Entity.



# SUPPLIER'S BID

Deár S	Sir/Mada	Name and addr	ess of Procuri	ng Entity)					
numbe and C	rs], thest commissi	ed the bidding eceipt of which oning of Ten (citon 4 in accordance)	is hereby ack (10) 1.2 kWp	nowledged <i>Off-Grid</i> 2	l, we of Solar Pi	fer to exc <i>totovolta</i>	ecute th	e Supp ems in	ly, Installatio Advent Acre
The V	alue Add	ed Tax (VAT)							_
(amou	nt in wor	ds and figures)		•••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
The P	rice of ou	r bid, including	VAT is						
		ars as per detai		(in			price in	words	and figures,
		s (at the Employ er to execute		pursuant	to al	ternative	bids	for th	e amount GYD
(a)		luding all subcodocuments, hav							
(b)	bidding	luding all subco documents, hav e, or are not ine	e not been de	clared by t	he autho	rized Sta	ate body	on pro	
		if our Bid is acc of Requiremen		y the Good	ds, in acc	cordance	with a c	lelivery	schedule giv
to the	amount o	cepted, we under ofoperly and within	, comprising	<u> </u>	% (	of the Co	ntract P	rice in c	order to execu
We he	ereby cor ished for	nfirm that this l	oid shall be va d it shall be bir	alid during ding until	the expi	ry of the	days indicate	starting d perio	g from the da
We ur	nderstand	that you are not	bound to acce	pt the low	est or an	y bid you	ı receive	э.	
Dated	the	day of		202					
		d to sign the Bio							
			(no	ame of Sup	plier)	··			
	Full nam			Title)			/C:	a coferma a	and seal)

# PRICE SCHEDULE

Item No.	Brief description of goods	Quantity	Unit price	Total price	Total Cost including delivery and VAT
	Supply, Installation and Commissioning of ten (10) 1.2 kWp Off-Grid Solar Photovoltaic Systems in Advent Acres, Loo Creek, Region 4				
	PV module				
	Mounting structure:				
	Inverter				
and the second second second	Charge Controller				
	Batteries				
	Web-based energy monitoring system				
	Cabling and miscellaneous				
A STATE OF THE STA	Fire Extinguisher				
	Installation and commissioning materials for PV system (including all materials/components				
	required for interconnection to onsite)				

Please note that the procuring entity will not be responsible for customs clearance of the goods.

Duly authorized to sign for a	nd on behalf of	
	(name of Bidder)	
(Full name)	(Title)	(Signature and seal)

# SUPPLY CONTRACT FOR GOODS

THIS	CONTRACT m	ade the		day of		202	between (	Juyana	Energy
Agen	cy (hereinafter	referred		"the		Entity"),	on the	one	hand,
anu			city and	 d_count			<i>Supplie</i> nafter refer	<i>rj</i> rred to	from
Suppl	lier"), on the other	hand have co	me to ar	Agreer	ment on the fo	ollowing:	narcor rotor	irod to	us the
Insta. Adve	Procuring Entity Illation and Comment Acres, Loo Comment and services to 1 (hereinafter ref	missioning o eek, Region	of Ten ( 4 and h	(10) 1.2 as accep	kWp Off-O	Grid Solar olier's bid	Photovolte	aic Syst	<i>tems in</i> ndicated
THIS	CONTRACT W	TNESSES A	S FOLL	OWS:					
	In this Contract, to them in the Co					neanings a	s are respec	ctively a	assigned
2.	(b) Bid and (c) Schedul (d) Technic (e) General (f) Special	ocuments shang Entity's No Price Schedule of Requirential Specification Conditions of Conditions of	otificatio le subminents; ons; f Contract	n of Aw itted by ct; ct;	vard; Bidder;		d its integra	ıl part, v	/iz.:
3.	This Contract sh or inconsistency listed above.	-						-	
	In consideration of mentioned, the S Services, and real Contract.	upplier hereb	y coven	ants wi	th the Procur	ing Entity	to provide	the Go	ods and
1	The Procuring Er Goods and Servic may become pay prescribed by the	es and the ren able under the	nedying	of defe	cts therein, th	e Contract	Price or su	ich other	r sum as
accor	VITNESS of the dance with the le ment.								
Signe	ed and Sealed		[Fu	ll name	and title of P	rocuring E	Entity's repr	resentati	ive]
Signe	ed and Sealed	.,	[Fu	ll name	and title of S	'upplier 's r	epresentati	ve]	

# **BID-SECURING DECLARATION**

[The Bidder shall fill in this Form, if applicable pursuant to BDS.]

Date o	of Bid S	ubmission (day/month/ year):		
RTB,	MTB R	Reference No. (number of bidding process):		
Altern	ative N	(o. (insert identification No. if this is a Bid for an alternative):		
To: <i>G</i>	uyana l	Energy Agency		
We, th	ne under	rsigned, declare that:		
1.	We ur Declar	nderstand that, according to your conditions, bids must be supported ration.	by a Bid-Sec	uring
2.	contra	ccept that we will automatically be suspended from being eligible fact with the Procuring Entity for the period of time of two (two) years of the award of contract if we are in breach of our obligation(s) under use we:	s starting fro	m the
	(a)	Have withdrawn our Bid during the period of bid validity speci Bidding Data Sheet; or	ified by us i	in the
	(b)	Having been notified of the acceptance of our Bid by the Procuring period of bid validity, (i) fail or refuse to execute the Contract, if re or refuse to furnish the Performance Security, in accordance with the	equired, or (i	
3.	upon t	nderstand this Bid Securing Declaration shall expire if we are not the the earlier of (i) our receipt of a copy of your notification of the name; or (ii) twenty-eight days (28) after the expiration of our Bid.	successful B	idder, essful
• • • • • • • •	t signa	nture of person whose name and capacity are shown] In(Insert legal capacity ing Declaration]	the capacit	 y of gning
Declar Duly a	ation) iuthoriz	ed to sign the bid for and on behalf of:  [insert complete name of person signing the B		
		1 0	- rt date of sigi	ningl

# **BID SECURITY**

# (Bank Guarantee or Insurance Bond)

Whereas	<i>[name of Bidder]</i> (hereinafter referred as						
Whereas"the Bidder") is ready to submit his bid dated	kWp Off-Grid Solar Photovoltaic Systems in						
Advent Acres, Loo Creek, Region 4 [name and/or description of goods] (hereinafter referred as "the Bid"),							
to	ty], (hereinafter referred as "the Bank"), are bound Procuring Entity] to the sum of, hall be made in whole and in a timely manner; the and authorized persons. This is to confirm that the						
license issued to the Bank shall provide for activity signing that guarantee is entitled to act on behalf of the or of General Stockholders Meeting is required, it is required.	e Bank, and if the approval of Board of Directors,						
THE CONDITIONS of this obligation are as follows:							
Form of Bid; or  2. If the Bidder having received notice from the the period of bid's validity:  (a) fails or rejects to sign the Contract at the	od of bid validity specified by the Bidder on the Procuring Entity that their bid is accepted within the request of; or nece security in accordance with the Instructions to						
We undertake to pay the Procuring Entity the above without needing the Procuring Entity to show groun sum requested by the Procuring Entity is due to him conditions, specifying the condition or conditions oc	nds or reasons of that request, provided that the because of the occurrence of one or two or both						
This guarantee shall remain in force during validity period, and any request in respect there abovementioned date.							
(Full name of Bank / Surety representative)	(Title) (Signature and seal)						
Dated on «» day of202							
Address of the Bank / Surety issuing guarantee:							

# MANUFACTURER'S AUTHORIZATION

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

Date of Bid Submission (day	/ month/ year):	
IFB No:[insert number of bid	ding process]	
Alternative No.:[insert identij	fication No if this is a Bid for an alter	native]
То:	[insert complete name	of Purchaser]
WHEREAS		
factories at	[insert complete not[insert type[insert ze	ert full address of Manufacturer's [insert complete name of pwing Goods, manufactured by use
We hereby extend our full g	uarantee and warranty in accordance respect to the Goods offered by the ab	e with Clause 1.3 of the General
Signed: Manufacturer]	finsert signature(s) of a	authorized representative(s) of the
Name:the Manufacturer]	[insert complete name(s) of a	authorized representative(s) of
Γitle:	[insert title]	
Duly authorized to sign this Aname of Bidder]	uthorization on behalf of:	finsert complete
Dated on	day of	,[insert date of signing]

# PERFORMANCE SECURITY

(Bank Guarantee/ Performance Bond)

TO:Guyana E	nergy Agency			
[No	ame of Procuring Entit	y]	_	
undertaken, in accordance 202_ Photovoltaic Systems in	with the Contract No to Supply, Install an Advent Acres, Loo C	nd Commissio	(hereinafter called "the Supplier"  [Contract number]  ion Ten (10) 1.2 kWp Off-Grid S  4 [description of Goods and Serv	dated S <i>olar</i>
(hereinafter called "the Co	ntract"),			
with a [Bank Guarantee of	or Performance Bond	from an insura	entract that the Supplier shall furnish rance company licensed by the Bar ace with the Supplier's obligations u	nk of
AND WHEREAS we have	e agreed to furnish the	Supplier with a	a security,	
the Supplier, up to a total words and figures) and, v default with the Contract,	of ve undertake to pay you and without cavil or a	ou, on your fir	irst request notifying of the Contract sum or sums within the above limits of your request or the sum special sum of your request or the your request or your re	<i>ity in</i> etor's ts, as
Procuring Entity and the Sunder the Guarantee, and shall be valid until full conlicense issued to the Bank signing the guarantee is en	Supplier by Additional we waive any notice of appletion of the Contract shall provide for act at the contract and the act on behalf	Agreement shaft modification, or Conditions by ivity on issuan of the Bank /	of Contract which may be made by the last in no way release us from obligation, addition, or amendment. This guarable the Supplier. Also, we confirm the nee of a bank guarantee, and the post of Surety, and if the approval of Boats already received, and there is no	ations antee at the erson ard of
This guarantee shall be va	lid till theday of		202	
(Full name of Bank / Sure	ty's representative)	(Title)	(signature and seal)	
Dated on day of	f	202		
Address of the Bank / Sur	ety issuing guarantee:			

**Annex: The Contract** 

# LETTER OF ACCEPTANCE

(Letterhead paper of Procuring Entity)

		(date)
To:		
(Name of S	,	
(address of S	Supplier)	
We hereby notify you that your bid dated thesupply of goodstotal of	day of	202, for the(description of goods) up to a
(amount in figure	es and words)	
as amended and modified in accordance with the Ir agency.	nstructions to I	Bidders is hereby accepted by our
Simultaneously, we send you the Form of Contract Instructions to Bidders, during seven (7) days to sigour address. Jointly with the signed Contract, we recaccordance with ITB Clause 20.2.	n and date the	Form of Contract and return it at
You hereby entrusted to start supply of the Goods, i Contract.	n accordance v	with the terms and conditions of a
Name of Agency		
Full name and Title		
Signature of Authorized Representative		

# AFFIDAVIT OF AUTHORIZATION

TO: Guyana	Energy Agency		
WHEREAS who is the Su	pplier		[name of Supplier],
	epresentative] to submoded goods to be supplied	ed by us, and	[name and address of tract based on Invitation for Bids for the
	[Full name, title	, signature for and on beha	f of Supplier]
Dated on(date)	day of		(seal)
Note:	signed by a (	<del>-</del>	afted on a letterhead of the Supplier and astice of Peace. The Bidder shall include

# **EVALUATION AND QUALIFICATION CRITERIA**

No.	DESCRIPTION	PASS/FAIL
1.	Submission of a valid business registration or certificate of incorporation that is	
	clearly legible. Incorporated companies must submit a list of directors.	
2.	Submission of a valid NIS compliance certificate in the name of the business as	
	per business registration. Document must be clearly legible.	
3.	Submission of a valid GRA compliance certificate in the name of the business as	
	per business registration. Document must be clearly legible.	
4.	Completed and signed supplier's bid page (31).	
5.	Completed and signed price schedule must be submitted.	
6.	Completed and signed delivery schedule page (20) or statement of agreement	
	to supply goods/services within the period specified in the delivery schedule.	
7.	Provision of documentation detailing the technical specifications for the items	444
	listed in the Schedule of Requirement page (20) or evidence to show that the	
	goods match the Technical Specifications as detailed on page (21).	
8.	If bid amount is below G\$15m, a bid securing declaration must be completed and	
İ	signed by the bidder. However, if bid amount is G\$15m and above, a bid security of	
	two percent (2%) of the tendered sum is required in the form of a Bank guarantee or	
	a bond from an Insurance company licensed by the Bank of Guyana.	
9.	Demonstrate experience and technical capacity by providing documentary	7
	evidence that shows the completion of a minimum of two (2) contracts of similar	
	size and scope to the Project over the last two (2) years. Bidder must provide	
	copies of contracts with previous clients. Bidder must also demonstrate the	
	experience of completing contracts of a minimum value of G\$3,000,000 for	
	each year over two (2) years.	_
10.	Evidence of financial capacity, in the name of the bidder, representing 50% of the	
	bid price. Financial Capacity must be evidence in the form of a bank statement	
	or Line of credit from a bank or Insurance company licensed by the Bank of	
	Guyana. The line of credit must state a figure. The document must be dated	
	within one month of the bid opening date and be clearly legible. When a	
	photocopy is presented, it must be certified a 'true copy of original' by the issuing	
11	company.	
11,	Bidder must provide a letter of Authorization for the Procuring Entity to seek	
	reference from the bidder's Bank relating to the financial capacity evidence	
	supplied. The document must be dated within one month of the bid opening date and be clearly legible.	
1,2.	Written confirmation of authorizing signatory must be provided.	
15 M	This must be in the form of an Affidavit of Authorization and endorsed by a	
-63.	Commissioner of Oaths or Justice of Peace.	}
P13.6	Bidder must provide audited financial statements for the past three years for	
1 8 10 Oct 10	past time years for	

	incorporated companies. Financial statements must be audited by a Chartered	
	accountant/accountancy firm and include an auditor's note.	
	OR	
	Registered businesses must provide Balance Sheets, Profit and Loss	
	Accounts, and Income and Expenditure Accounts for the past three years  These financial statements must be approved by a Chartered	
	These financial statements must be approved by a Chartered accountant/accountancy firm. The financial analysis would include: Current	
	ratio: >1 for each year of the last 3 years;	
	Net worth: +ve and minimum of 20% of bid value;	
	Average annual turnover: GYD 2million.	!
14.	The Bidder shall provide accurate information on the related bidding form as	
17.	provided on page 45 about any litigation or arbitration resulting from contracts	
	The state of the s	
	completed or on-going under its execution over the last five years.	
	Pending Litigation: All pending litigation shall in total not represent more than	
	50% of the Bidder's net worth and shall be treated as resolved against the bidder.	
	If bidder has pending litigation representing more than the stated	į.
	percentage, the bid will not be considered.	•
	Litigation History: Non-performance of a contract did not occur as result of	
	supplier's default since 1st January, [2018]. If bidder has a history of	
	nonperforming contract the bid will not be considered.	
15.	Bidder must provide a letter stating any or no terminated or abandonment of	
	projects. The letter must be dated within one month of the bid opening date.	
16.	Provision of valid manufacturer's authorization or authorized distributor letter	
10.	Technical Requirements	
17.	Photovoltaic Modules	
17.		
	PV Modules are according to International Standards IEC 61215, IEC	
	61730, IEC 61701, IEC 62804, UL1703 etc.)	
	All PV modules are of same capacity totaling 1.28 kWp	
	Manufacturer must be internationally recognised and provided references	
	and certificates on module testing	
	All modules should be made of crystalline silicon solar cells	
	MC4 connectors for all Modules	
	20 years warranty on Modules	
18.	Mounting Structure for PV Modules	
	Meets required technical specifications.	
19.	Off Grid Inverter	
	The minimum size of each Inverter shall be 1.5 kW or above and totaling	
	between 90% and 100% the solar array name plate capacity	
	Master/Slave or String type	
	Off-Grid Voltage – 110/220Vac	
	AC Grid Frequency – 60 Hz	
	• Operating Frequency range: Frequency Range ≤ 58.4 to ≥ 61.7	
	• (Field Selectable)	
	Certificates and Compliance with International Standards Including (UL)	
	1741-2010, UL 1699B, IEEE 1547-2003, IEEE 1547.1-2003, ANSI/IEEE	
	C62.41, FCC Part 15 A & B)	

- Sinewave output;
- High efficiency (AC) > 90% @ P/Pn (AC) = 10%;
- Protection against overcurrent and overvoltage;
- Indications of status of operation (e.g. LED);
- Capability of connecting monitoring devices;
- Ground fault monitoring / grid monitoring.
- Safety measures (EN 61000, EN 60950 and others).
- Interface to the main grid (switchboard including manual disconnection device).
- Ten (10) Years Warranty

#### 20. Hybrid Inverter (if any)

- Minimum Capacity of 1.5 kW
- Master/ Slave or String
- Integrated soft start/generator support;
- Versatile complete for off-grid management as well as grid-tie battery backup/AC Coupling;
- Minimum Size 1.5 kW
- Suitable for systems from 1.5 to 3 kW;
- Excellent overload characteristics with active temperature management;
- Five-Year Standard Warranty:
- Certification UL 1741 / UL 1998;
- Modular, stackable design; Nominal Frequency 60 Hz;
- Frequency Range  $\leq 58.4 \geq 61.7$  (Field Selectable):
- Pure Sine Wave;
- Automatically transfers between inverter power and incoming AC power source;
- Compatible battery types Flooded, Gel, AGM, LiON;
- Indications of status of operation (e.g. LED);
- Over voltage and under voltage protection;
- Over-temperature protection:
- Overload protection;
- Short circuit protection.
  - Five-Year Standard Warranty;

# Energy Storage System (Lithium Technology)

- Minimum capacity: 6 kWh
  - Supply and installation of energy storage systems as requested above;
  - Batteries should be deep cycle type and rechargeable;
  - Lithium Ion/Iron technology;
  - Capable of 80% depth of Discharge
  - Design for renewable energy applications
  - Batteries are to be placed on racks to minimize the use of space;
  - Bidders are to supply the racks which must be made of metal. Bidders are to supply the racks which are to be fully fabricated from metal and resistant to rust. Racks should be made to minimize the space required to store the batteries and allowance for effective ventilation. Welding, bolts and nuts used must be resistant to rust. Racks must be painted in two coats with anti-rust protective layer paint. The preferred color would be black.
  - Bidders are to supply drawings of the racks with battery bank configuration;



	Minimum battery size is 300 Amp-Hour; C10
	Sealed maintenance free;
	Manufacturer's data sheets containing battery performance specifications
	must be provided. Batteries must be procured from same make
	(manufacturer) having same ampere-Hour and voltage rating;
	• 6 years' warranty on batteries;
	• 2,000 and above cycles at 80% depth of discharge
	Standards to be conformed to:
į	• UL 1989
į	• IEC 61427:1999
	• UL 2054
	Manufacturing process must have conformed to environmental management standard ISO 14001.
22.	Cables
	Meets required technical specifications.
23.	Monitoring System
	The installation shall provide real-time web-based electric energy, power meter
	and appropriate current transformers to record electric consumption of the building and solar energy produced and provide a combined recording of all
	inverter/circuits. It should provide:
	Graphical and Numerical real time energy information (total power / )
	consumed, total energy consumption, net energy);
	Graphical and Numerical renewable energy monitoring (solar power)
	generated, solar energy produced, avoided carbon dioxide emissions);
İ	Historic Data;
	Data export via push or pull with an open data API.
24.	Charge Controller
	Charge controller must be rated 25 % over system capacity size
	Nominal Battery voltage: 12/24/48 V
	Maximum Power Point Tracking (MPPT) charging technology
	Charge regulation method: Three stage (bulk, absorption, float) plus
	manual equalization
	Available monitoring and configuration
	Supported battery types: Flooded, GEL, AGM, Custom
	Compatible with any brand of PV module, any grounding method
	Stand-alone application or integration with inverter charger system
	<ul> <li>Certification: UL1741, CSA 107.1, EN 50178/IEC 62477-1</li> </ul>
	5 years Warranty
25.	Design Diagram
	Provide detailed schematic design layout of the proposed AC coupled
	installation including all connections; explanatory notes for sizing of
	equipment and components that comprise the system, and energy
	production calculations.
	Design complies to NEC 2014 Articles 690 and 705
26.	Installation
	All installations are to be conducted in accordance with NEC 690
	requirements, which cover installation, protection, and grounding of solar

		····			
	PV systems.				
	Grid interconnection requirements are met (if any)				
	Earthing system requirements are met				
	<ul> <li>Monitoring system connection to existing facility.</li> </ul>				
	<ul> <li>Hybrid inverter circuit breaker requirement met (if any).</li> </ul>				
27.	Product Manual and Label for each equipment are provided				
	Voltage / wattage/ current				
	Model number				
	Serial number				
	Certification				
	Manufacturer's brand				
28.	Submission of bidders statement indicating its acceptance or otherwise in offering Local after sales service of no less than three (3) years. Bidder must state the nature of service that will be provided.				
29.	Provide statement on availability of spare parts from purchaser's country				
30.	Provide statement on complete system warranty offered. At least three (3) years warranty on complete system is required.				
31.	Warranty: Two types of warranty have to be offered by the Bidder:				
	<ol> <li>Warranty on hardware failures on all products offered and used according to international established terms (3 years minimum)</li> <li>Warranty on the proper operation of the provided equipment according to the specification and terms fixed in the contract between the Seller and the procuring entity (3 years minimum)</li> </ol>				
32.	Submission of an implementation schedule indicating important milestones such as equipment delivery to site, installation, testing and commissioning of system. Frequent progress reports and work plan are to be provided to the Procuring Entity as required by the procuring entity during project execution.				

# Award of contract

The contract will be awarded to the Bidder who is substantially responsive to the bid document and who has offered the lowest bid price.

	Pending Litigation Format					
□ No pendin	□ No pending litigation in accordance with Evaluation Criteria # 14					
Year of dispute	Amount in dispute (currency)	Outcome as Percentage of Net Worth	Contract Identif	ication	Total Contract Amount (current value, currency, exchange rate and USD equivalent)	
[insert year]	[insert amount]	[insert percentage]	Contract Identification complete contract na and any other identification	ame, number,	[insert amount]	
			Name of Purchaser: [insert full name]			
			Address of Purchaser street/ city/ country]	: [insert		
			Matter in dispute: [in issues in dispute]	adicate main		
			Status of dispute: [in being treated under to or being dealt with by Judiciary]	Arbitration		

# 3. Litigation History

	Litigation History Format			
☐ No court/arbitral award decisions against the Bidder since 1 <sup>st</sup> January 2018, in accordance with Evaluation Criteria # 14				
Year of award		Total Contract Amount (current value, currency, exchange rate and USD equivalent)		
	•			
[insert year]	Contract Identification: [indicate complete Contract name, number, and any other identification	[insert amount]		
	• Name of Purchaser: [insert full name]			
	Address of Purchaser: [insert street/city/country]			
	Matter in dispute: [indicate main issues in dispute]			
	• Party who initiated the dispute: [indicate "Purchaser" or "Supplier"]			
	Status of dispute: [indicate if it is being treated by under Arbitration or being dealt with by the Judiciary]			