STANDARD BIDDING DOCUMENTS



GUYANA POWER AND LIGHT INC

PROCUREMENT OF WORKS

IFB #GPL-PD-47- 2020

August 2020

Lot 1 - Supply, Installation & Commissioning of a 10kWp Grid-Connected Solar Photovoltaic System at Organization of American States (OAS), the Ministry of Agriculture Building, Lot No. 18 Brickdam, Stabroek,Georgetown

Lot 2 – Supply, Installation & Commissioning of a 20kWp Grid-Connected Solar Photovoltaic System at the Inter-American Institute for Cooperation on Agriculture (IICA), Ministry of Agriculture Building, Lot No. 18 Brickdam, Stabroek, Georgetown

Lot 3 – Supply, Installation & Commissioning of a (10)kWp Grid-Connected Solar Photovoltaic System with 12 kWh Battery Energy Storage System and a 5kW Hybrid Inverter at the Guyana Power and Light Inc., 257-259 Middle Street, South Cummingsburg, Georgetown

> Closing Date: Wednesday September 22, 2020 @ 10:00 hrs. or 10:00am Bid Opening: Wednesday September 22, 2020 @ 10:30 hrs. or 10:30am

Invitation for Bids (IFB) Co-operative Republic of Guyana GPL-PD-47-2020

The Guyana Power and Light Inc. (GPL) invites sealed bids from selected bidders for:

Lot 1 - Supply, Installation & Commissioning of a 10kWp Grid-Connected Solar Photovoltaic System at Organization of American States (OAS), the Ministry of Agriculture Building, Lot No. 18 Brickdam, Stabroek, Georgetown

Lot 2 – Supply, Installation & Commissioning of a 20kWp Grid-Connected Solar Photovoltaic System at the Inter-American Institute for Cooperation on Agriculture (IICA), Ministry of Agriculture Building, Lot No. 18 Brickdam, Stabroek, Georgetown

Lot 3 – Supply, Installation & Commissioning of a 10kWp Grid-Connected Solar Photovoltaic System with 12 kWh Battery Energy Storage System and a 5kW Hybrid Inverter at the Guyana Power and Light Inc., 257-259 Middle Street, South Cummingsburg, Georgetown

- The bidding documents can be purchased for a non refundable fee of G\$5,0000 from the Procurement Manager, Guyana Power and Light Incorporated, 40 Main Street Georgetown Guyana or an electronic copy can be downloaded free of cost from our website <u>www.gplinc.net</u>. IMPORTANT: Bidders downloading the electronic copies are advised to forward a registration email to <u>ajohnson@gplinc.com</u>, <u>kwilson@gplinc.com</u> or proc_mng_sect@gplinc.com, stating the following: Bid Number,Name of Bidder, Address, Contact No. and Email address.
- 2) Local bids must be submitted with a valid **National Insurance (NIS), Inland Revenue** (**GRA**) compliance certificate.
- 3) A bid Security in the sum of 2% of the tendered sum *must* be submitted along with the bid.
- 4) Bids shall be valid for 120 days after the date of bid opening.
- 5) Bids must be placed in sealed envelopes. The bid envelope should contain three separate envelopes for each 'Lot' with the appropriate labels and addressed to: The Secretary, Tender Board, Guyana Power & Light Inc., 91 Duke Street, Kingston, Georgetown and deposited in the Tender Box before <u>10:00 hours on 22nd September, 2020</u>, and marked on the top right hand corner of the envelope "Bid for Lots 1, 2 & 3; the Supply, Installation & Commissioning of Solar PVs".

- 6) Bid Opening is scheduled for 10:30 hrs (10:30am) on 22nd September, 2020 at GPL's Board Room 91 Duke Street, Kingston, Georgetown, Guyana in the presence of Bidders/Representatives who may choose to attend.
- A Pre bid Meeting inclusive of the site visits will be held on 8th September, 2020 at 9:00 hrs (9:00am) at Guyana Power and Light, 257-259 Middle Street, South Cummingsburg, Georgetown.
- 8) Late bids shall be rejected and returned to bidders upon opening.
- 9) GPL reserves the right to accept or reject any bid, and to annul the process and reject all bids, at any time prior to award of contract, without thereby incurring any liability to the affected prospective bidder (s) any bid.

Note: Any bidder/representative who chooses to attend the opening of this bid will be subjected to entry protocols in keeping with the COVID-19 pandemic. Only one (1) representative is allowed per entity and the representative will be subject to body temperature test, hand sanitizing and mandatory use of face mask at all times. Failed body temperature test and/or resistance to comply with the aforementioned will prohibit your participation in the bid opening.

CONTENTS

INSTRUCTIONS TO BIDDERS (ITB)	5
Bid Data Sheet (BDS)	
Special Conditions of Contract (SCC)	
Schedule of Requirements	
TECHNICAL SPECIFICATIONS	
QUALIFICATION INFORMATION FORM	51
SUPPLIER'S BID	53
Price Schedule	
Supply Contract for Goods	
BID SECURITY	
Bid-Securing Declaration	60
Manufacturer's Authorization	62
PERFORMANCE SECURITY	64
Letter of Acceptance	65
Power of Attorney (Applicable)	
Evaluation and Qualification Criteria	67

INSTRUCTIONS TO BIDDERS (ITB)

A. Introduction

1. Scope of works and Source of Funds

The Procuring entity is (identified in the Bid Data Sheet and hereinafter referred to as "the Employer") for the execution of the Works described in the *Bid Data Sheet* and will use therefore funds indicated in the *Bid Data Sheet*.

2. Eligible Bidders

- 2.1 This Invitation for Bids is open to all contractors from any country, exclusive of those prohibited by the legislation of Guyana or by another international agreement the participant of which is Guyana.
- 2.2 A bidder may be an individual or legal entity, or a combination of any abovementioned forms with a formal intent to enter into an agreement or to operate under an existing agreement in the form of a Partnership.
- 2.3 Government and municipal enterprises may only participate if they are legally and financially autonomous, and if they are legally eligible to carry on business.
- 2.4 Bidders should not have a conflict of interests, should not be associated (nor have been associated in the past), directly or indirectly, with any firm or any of its affiliates that has been engaged by the Employer to provide consulting services at preparation stage of the bidding documents, technical specifications, project and other documents to be used for procurement of works in accordance with this Invitation for Bids or being proposed as Engineer under this Contract.
- 2.5 A Bidder or any affiliate that has been engaged by the Employer to perform consulting services at preparation stage of the bidding and other documents shall not be entitled to participate in bidding, and if conflict of interests is found, bidder' bid shall be rejected.
- 2.6 Bidders should provide information on legal status, place of registration and principal type of business; a license to execute the works specifying identification number and validity period, and a written power of attorney of the signatory of the bid to assume obligations on behalf of the Bidder;
- 2.7 The bidder should not have more than one improperly performed procurement contract within the past two years preceding the commencement of the present procurement proceeding.
- 2.8 The bidder should not be insolvent, bankrupt, their property should not be controlled by judicial authority, their cases should not be commanded by court or by the person appointed by court, their commercial activities should not be suspended, and they should

not be a subject of such judicial proceedings;

- 2.9 The bidder should fulfill the tax and social insurance fund liabilities in Guyana;
- 2.10 Bidders, and their management personnel within three years preceding the commencement of procurement proceedings should not be associated with giving false information or a misrepresentation as to their qualification information for the purposes of entering into a procurement contract;
- 2.11 Bidders should provide information on the total annual volume of construction works executed for each of the last two years;
- 2.12 Bidders should provide information on major items of construction equipment proposed to carry out the Contract;
- 2.13 Bidders should provide information on the qualifications and experience of key management and technical personnel proposed for the Contract;

3. Qualifications of Bidders

- 3.1 Information on bidders' qualifications is to be included in Annex No. 9 "Qualification Information" to be incorporated in the bid.
- 3.2 A bid submitted by a partnership or syndicate consisting of two or more firm-partners should comply with the following requirements:
 - (a) The bid shall include all the above-listed information for each partnership or syndicate partner;
 - (b) the bid shall be made up and signed so as to be legally binding on all partners;
 - (c) one of the partners shall be nominated as being in charge, and his authorities should be confirmed by authorization to be signed by the authorized signatories of all partners;
 - (d) the bid should incorporate a formal agreement of partnership (or a letter of intent to establish one) which specifies, inter alia, that all partners shall be liable jointly and severally for execution of the Contract, and that the partner in charge shall be entitled to incur liabilities and receive instructions for and on behalf of any and all partners, and all operations on the execution of the Contract, including payment shall be done exclusively by the partner in charge.
- 3.3 To qualify for award of the Contract, bidders should meet the following minimum qualifying criteria, and provide the following information and documents with their bids:
 - (a) Volume of construction work executed for the last 2 years should be not less than G\$ 55,000,000;
 - (b) To own or to have the possibility to lease, hire, etc the essential construction equipment listed in the Qualification Information form;

(c) Managers and line employees with experience in executing works of a similar nature and size for not less than 5 (five) years;

4. One Bid per Bidder

Each Bidder shall submit only one Bid, either individually or as a partner in a partnership or syndicate. All bids involving the Bidder who submits or participates in more than one Bid (exclusive of subcontractors, or permitted or required alternatives) shall be rejected from participation in bidding.

5. Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of the bid. The Employer shall not be responsible or liable for those costs.

6. Site Visit

The Bidder, at the Bidder's own responsibility and risk, may visit and examine the Site of expected Works and its surroundings. All information obtained by the Contractor individually while visiting the site, may be used by him to prepare the bid and enter into the Contract. The costs of visiting the Site shall be at the bidder's own expense. The bid submission means that the Bidder has examined the Site of future Works and has accepted all the existing conditions.

B. List of documents included in the bidding documents

7. Content of Bidding Documents

- 7.1. The set of bidding documents includes the following:
 - (a) Instructions to Bidders (ITB);
 - (b) Bid Data Sheet (BDS);
 - (c) General Conditions of Contract (GCC);
 - (d) Special Conditions of Contract (SCC);
 - (e) Form of Bid;
 - (f) Qualification Information;
 - (g) Drawings;
 - (h) Bill of Quantities;
 - (i) Technical Specifications;
 - (j) Form of Contract;
 - (k) Form of Bid Security;
 - (1) Form of Performance Security;
 - (m) Form of Bank Guarantee for Advance Payment;
 - (n) Form of Power of Attorney for signing the bid.
- 7.2 The Bidder shall examine all instructions, forms, conditions and technical specifications incorporated in the bidding documents. Failure to provide all information required in the bidding documents, or submission of a non-responsive bid may result in rejection of his bid.

8. Clarification of Bidding Documents

- 8.1 The Bidder requiring any clarification of the bidding documents may address the Employer at the address *indicated in the Bid Data Sheet* in writing by fax or electronic messaging. The Purchaser will respond in writing to any request for clarification of the bidding documents to be received not later than 7 (seven) days prior to the deadline for submission of bids. Copies of response, including an explanation of matter's substance, but without identifying its source, will be forwarded by the Employer in writing to bidders who received the bidding documents within 3 (three) working days.
- 8.2 The Pre-bid conference will be conducted according to decision of the Purchaser and, if so, at the time, date and address indicated in the *Bid Data Sheet*. Before the conference Bidders may address the Employer with questions for the conference, and at the conference may ask any question and receive answer to the questions submitted regarding the bidding documents. All information obtained at pre-bid conference, requests of potential bidders related to clarification of the bidding documents, and responses to them shall be recorded by the Employer, and by the results of conference, a record is made and promptly communicated to all Bidders who received the bidding documents in order to enable bidders to take them into account when preparing their bids.

9. Amendment of Bidding Documents

- 9.1 In special circumstances, at any time before expiry of the deadline for submission of bids, the Employer, for any reason, whether at its own initiative or in response to request for clarification forwarded by the Bidder, may modify the bidding documents by issuing addenda to it. Any addenda issued shall be a part of the bidding documents, and should be sent to all bidders who received the bidding documents from the Employer, which may be done by using fax or electronic message. Bidders should confirm the receipt of each addendum in writing or by fax or electronic message, and these addenda shall be binding.
- 9.2 In order to give Bidders enough time to take into account the amendments introduced while preparing their bids, the Purchaser, at his discretion, may extend the deadline for submission of bids.
- 9.3 The Employer at any time before expiry of the deadline for submission of bids may vary the qualities by a 20 percent increase or decrease

B. Preparation of Bid

10. Language of Bid

The Bid prepared by the Bidder and all correspondence and documents related to this Bid that is exchanged by the Bidder and the Purchaser, should be written in the language *specified in the Bid Data Sheet*.

11. Documents Included in the Bid

The Bid prepared by the Bidder should include the following documents:

- (a) filled in Form of Bid;
- (b) qualification information and documents confirming that Bidder has a sufficient qualification required for the execution of the Contract in case if his bid accepted;
- (c) priced Bill of Quantities and priced list of consumable materials;
- (d) Bid Security provided in accordance with ITB Clause 15;
- (e) General Conditions of Contract and Special Conditions of Contract (signed by

Bidder page-by-page);

- (f) Technical Specifications used for the execution of the Works;
- (g) Alternative offers (at the Purchaser's request);
- (h) other documents to be filled in by bidders in accordance with the requirements indicated in *the Bid Data Sheet*;
- (i) Power of attorney for signing the Bid.

12. Bid Price

- 12.1 The Contract is applicable to the whole amount of Works listed in priced Bill of Quantities and list of priced consumable material price presented by the Bidder in its bid.
- 12.2 The Bidder shall indicate the rates and prices for all kinds of works included in the Bill of Quantities, drawings and specifications. The kinds of works for which no rate and price is entered by the Bidder will not be paid for when executed, and it is considered that they are included in the rates and prices for other kinds of works.
- 12.3 When determining the bid price, the Bidder shall take into account the total value of labor, materials, plant, instruments, water, heat, electric power, transportation, machinery and equipment, and other services which are required during and for completion of the construction works.
- 12.4 All duties, taxes, and other levies payable by the Contractor under the current legislation of Guyana should be included in the bid price.

13. Bid Currency

The Bidder shall submit all documents on mutual settlements, and shall indicate the bid price in Guyana Dollars.

14. Period of Validity of Bids

- 14.1 Bids shall be valid during the number of days indicated in *the Bid Data Sheet* after the date of bid opening. The bid with shorter validity period should be rejected by the Employer as non-responsive to the bidding documents.
- 14.2 In exceptional circumstances, the Employer may request bidders to extend the period of validity of their bids for a certain period. Such requests and responses to them shall be made in writing, and may be sent by fax, telex or electronic mail. A Bidder may refuse the request on extension of the period of validity of his bid, without forfeiting the return of security. A Bidder agreeing to the request will not be required nor permitted to modify the bid, but will be required to extend the validity of bid security for a period of not less than 2 (two) weeks after the expiry of the extended period of bid validity.

15. Bid Security

- 15.1 The Bidder should provide, as part of his bid, the bid security (not more than two percent of bid price) in the amount and form specified in *the Bid Data Sheet* with a validity period of not less than 2 weeks after the expiry of a period of bid validity.
- 15.2 The Bid security should be expressed in the bid currency, or in another freely convertible currency, and shall be a bank guarantee issued by the bank located in Guyana or by local

correspondent bank in case when the security is issued by the foreign bank, or in any other form permitted by the Bid Data Sheet, such as debenture bond, cash, shares accepted for public transactions, certificates of deposit to bearer or promissory notes.

- 15.3 All bids not having a security shall be rejected by the Employer as non-responsive to the bidding documents.
- 15.4 The bid security shall be returned to unsuccessful Bidders as soon as possible but not later than fifteen (15) days upon the expiry of bid validity period, or after furnishing the performance security by successful bidder.
- 15.5 The successful Bidder shall receive the bid security after the signing of Contract pursuant to ITB Clause 34, and after furnishing the performance security (in the case when required).
- 15.6 The Bid security may be forfeited:
 - (a) if the Bidder:
 - (1) withdraws his bid after the opening during the period of bid validity specified in his bid;
 - (2) does not agree with the correction of arithmetical errors in his bid.
 - (b) in case of the Contract award to Bidder, if this Bidder fails:
 - (1) to sign the Contract on the terms and conditions specified in his bid, in accordance with ITB Clause 31, or
 - (2) to furnish the Performance Security, in accordance with ITB Clause 32.

16. Alternative offers at the request of the Purchaser

- 16.1 The Purchaser may request in the Bidding Documents for bid submission taking into account alternative conditions. In this case all requirements of the bidding documents are applied to alternative offers to that extent as well as to basic offers. The alternative offers shall not be considered, unless allowed or required in the bidding documents.
- 16.2 If so allowed by *the Bid Data Sheet*, the bidders wishing to submit the bids, taking into account the alternative conditions must also submit the bids that comply with the requirements of the bidding documents, including the basic technical features as indicated in the drawings and specifications. In addition to submitting the basic Bid, the Bidders shall provide all information necessary for a complete evaluation of the alternative conditions by the Purchaser, including design calculations, technical specifications, breakdown of prices, proposed construction methods and other relevant details.
- 16.3 Only the alternatives of Bidder who submitted the lowest evaluated Bid in accordance with the basic requirements of the bidding documents shall be considered by the Purchaser.

16.4 The Bidder, in his Bid, shall indicate the basic price of works to be executed, in accordance with the requirements of the bidding documents, and individually the price of works to be executed using the alternative offer.

17. Format and Signing of Bid

- 17.1 The Bidder should prepare 1 (one) original and 2 (two) copies of the bid clearly marking each as "**ORIGINAL OF THE BID**" and "**COPY OF THE BID**" accordingly. In the case of discrepancies between them, the original shall prevail.
- 17.2 The original and all copies of the bid shall be typed or written in indelible ink, and shall be signed by the Bidder or by a person (persons) having all authorities to sign the bid and obligations under the Contract. Permission to sign the bid should be specified in the power of attorney to be provided with the bid. All pages of the bid where new information, change or erasure inserted should be initialed (signed) by the person or persons signing the bid.
- 17.3 The bid shall contain no interlineations, erasures or overwriting, exclusive of the cases when the Bidder needs to correct errors which should be initialed by the person or persons signing the bid.

D. Submission of Bids

18. Sealing and Marking of Envelopes with Bids

- 18.1 The Bidder shall seal the original and each copy of the bid in separate envelopes, duly marking the envelopes as "**ORIGINAL**" and "**COPY**." The envelopes shall then be sealed in an outer envelope.
- 18.2 The inner and outer envelopes shall:
 - (a) be addressed to the Employer at the address specified in the Invitation for Bids;
 - (b) bear the Invitation for Bids (IFB) name and number, and the words "DO NOT OPEN BEFORE", 10:00 hours on specified in *the Bid Data Sheet*);
 - (c) Name and address of the Bidder
- 18.3 If the outer envelope is not sealed and marked as required by ITB Clause 18.2, the Employer will assume no responsibility for the bid's misplacement or premature opening.

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

19. Deadline for Submission of Bids

19.1 Bids must be received by the Employer at the address and on the dates specified in *the Bid Data Sheet.*

19.2 The Employer may, at his discretion, postpone the deadline for submission of bids for later period by modifying the bidding documents, and in this case the validity period of all rights and obligations of the Employer and the Bidders shall be extended subject to the changed deadline date.

20. Late Bids

All bids received by the Purchaser after the deadline for submission of bids specified by the Employer shall be rejected and returned to Bidder unopened.

21. Modification and Withdrawal of Bids

- 21.1 The Bidder may modify or withdraw his bid after the bid submission, provided that the Employer will receive a written notice of modification or withdrawal of the bid before the expiry of determined deadline for submission of bids, duly signed by an authorized representative, and accompanied by a copy of the authorization.
- 21.2 The Bidder's modification or withdrawal notice should be prepared, sealed, marked, and sent in accordance with the provisions of ITB Clause 18. In this case the outer and inner envelopes shall be additionally marked "**MODIFICATION**" or "**WITHDRAWAL**", as appropriate. A withdrawal notice may also be sent as a telegram by telex or fax with a subsequent written confirmation though post-office not later than the deadline for submission of bids.
- 21.3 No changes should be added in the bids after the expiry of the period determined for bid submission.
- 21.4 No bid may be withdrawn or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity indicated by the Bidder on the Bid Form. Withdrawal of the bid during this interval may result in the Bidder's forfeiture of his bid security, in accordance with ITB Clause 15.6.

E. Opening and Evaluation of Bids

22. Opening of Bids by Employer

- 22.1 The Employer will open all bids in the presence of bidders' representatives who wish to attend it 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.
- 22.2 The envelopes marked as "**WITHDRAWAL**" and "**MODIFICATION**" will be opened first and read out. In this case the bids for which a withdrawal notice has been sent in accordance with Clause 21, the envelopes shall be returned to Bidders unopened.
- 22.3 The bidders' names, the Bid prices, including alternatives (if alternatives permitted), price reduction specified in the Bidder's bid, 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 may be rejected in the bid opening, exclusive of the late bids which should return to Bidder unopened.

- 22.4 Bids (and modifications sent pursuant to ITB Clause 21.2) that have not been opened and read out at the opening shall not be accepted for further evaluation, irrespective of circumstance.
- 22.5 The Employer shall maintain the minutes of Bid opening where information to be disclosed to those who are present and to be promptly sent to the Authorized State Procurement Body is included.

23. Confidentiality Observance and Contacting the Purchaser

- 23.1 Information relating to the examination, evaluation and comparison of bids, and recommendations for the award of a Contract shall not be disclosed to other persons interested in this process until information on award of the Contract will be given to all Bidders.
- 23.2 No Bidder shall contact the Employer on any matter related to his bid from the date of bid opening and until the date of contract award, exclusive of requests for clarification of the bid.
- 23.3 Any effort on the part of any Bidder to influence the Employer's decision on the bid evaluation, bid comparison, or the Contract award may result in the rejection of this Bidder's Bid.

24. Clarification of Bids

During the bid evaluation, the Employer may, at his discretion, request the Bidder to give clarifications on his Bid. The request for clarification and the response should be given in writing, and in this case no change in the price or substance of the bid shall be sought, offered, or permitted, exclusive of the cases when required to correct arithmetical errors discovered by the Employer during the evaluation of bids in accordance with ITB Clause 26.

25. Preliminary examination of Bids

- 25.1 Prior to the detailed evaluation of bids, the Employer will examine the bids in order to determine whether they meet the eligibility criteria; whether there is a bid security, whether the documents have been properly signed; whether they are substantially responsive to the requirements of the bidding documents.
- 25.2 A substantially responsive bid is one which satisfies all the above provisions without a material deviation, reservation or omission. A material deviation reservation or omission is one:
 - (a) which affects in any substantial way the scope, quality, or performance of the Works;
 - (b) which limits in any substantial way, inconsistent with the Bidding Documents, the Employer's rights or the Bidder's obligations under the Contract; or
 - (c) whose rectification would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

They concern, for example, such important provisions as the bid security, bidders' qualification information, and effect on the scope, quality, or performance of the works,

taxes and insurance payments are deemed a material deviation. Determination by the Employer of each bid's degree of responsiveness to those requirements should be based on the content of the bid itself without reference to any additional sources.

- 25.3 The Employer may waive any minor nonconformity, small mistake or inaccuracy in the bid which are not a material deviation from the requirements of the bidding documents, and such non-conformity or inaccuracy shall not influence on evaluation of the bid. When the minor omissions do affect the evaluation of the bid (e.g., costs to the Employer, or other aspects of the required performance), the minor deviations should be quantified in monetary terms, with corresponding adjustments to the bid price (only for the purposes of comparing bids)
- 25.4 If the bid is not substantially responsive to the qualification requirements, it shall be rejected by the Employer, and may not be subsequently accepted as responsive after inclusion of appropriate corrections made by the Bidder.

26. Correction of Arithmetical Errors in Bids

- 26.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetical errors. Errors will be corrected by the Employer as follows:
 - (a) when there is a discrepancy between the value expressed in figures and words, the value in words will govern; and
 - (b) when there is a discrepancy between the unit rate and the total resulting from multiplying the unit rate by the quantity, the unit rate will govern, unless in the opinion of the Employer, there is an obviously gross misplacement of the decimal fraction, in this case the total will govern and the unit rate will be corrected.
- 26.2 The value indicated in the bid, by the Bidder's consent, will be adjusted by the Employer in accordance with the above-stated rules of correction of errors, and is deemed mandatory to the Bidder. If the Bidder does not accept the corrected bid price, the Bid shall be rejected, and the bid security may be forfeited in accordance with Clause 15.6.

27. Evaluation and Comparison of Bids

- 27.1 The Employer will evaluate and compare the bids determined to be substantially responsive to the requirements of the bidding documents in accordance with Clause 25.
- 27.2 When evaluating the bids, the Employer will determine for each Bid, the Evaluated Bid Price by adjusting the Bid Price as follows:
 - (a) Correction of arithmetical errors pursuant to Clause 26;
 - (b) Exclusion of provisional sums and costs for contingencies pursuant to the Bill of Quantities;
- 27.3 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the bidding documents or otherwise result unsolicited benefits for the Employer will not be taken into account in bid evaluation.

F. Award of Contract

28. Award Criteria

Exclusive of the cases provided for in Clause 29, the Employer will award the Contract to the Bidder whose bid is determined to be substantially responsive to the bidding documents, and who scores the highest Evaluated points, provided that this Bidder has been determined to be (a) eligible in accordance with Clause 2 and (b) met with qualification requirements in accordance with Clause 3.

29. Employer's Right to accept any Bid and Reject any or All Bids

- 29.1 The Employer reserves the right to accept or reject any or all bids, and to annul the bidding process at any time prior to the award of Contract, without thereby incurring any liabilities to bidders.
- 29.2 In case when the bidding process annulled, the Employer should, during 3 working days, send to all Bidders a notification indicating the reasons which served as a ground for the annulment, without giving evidences of that ground.

30. Notification of Award

- 30.1 Within 3 days after the conducted selection of the successful Bidder, and before the expiry of the period of bid validity, the Employer will notify the successful Bidder by telex, fax or email confirming by registered letter that his bid has been determined to be successful. This letter (hereinafter and in *«the General Conditions of Contract»* called *«*the Letter of Acceptance*»*) should refer to the sum that the Employer shall pay to the Contract for execution of the Works in accordance with the Contract (hereinafter and in the Contract Contract Price*»*).
- 30.2 The notification of award shall be equivalent to entering into a Contract, subject to the Bidder providing the performance security pursuant to Clause 32 and will sign the Contract pursuant to Clause 31.

- 30.3 At the same time that notification of award is given to the successful bidder, the Employer shall notify other bidders in writing of the selection, including the name of the successful bidder and the bid price. The Employer shall also publish a notice in the Public Procurement Bulletin indicating the name and address of the successful bidder and the bid price quoted by him.
- 30.4 Unsuccessful bidders may request in writing to the Employer for a debriefing seeking explanations for the failure of their bids. The Employer shall promptly respond in writing to any unsuccessful Bidder who requests the Employer in writing to explain on which grounds its bid was not selected.

31. Signing of Contract

- 32.1 At the same time with notification of award, the Employer will send to the successful Bidder, the Form of Contract contained in the Bidding documents.
- 31.2 During seven (14) days of the receipt of a written Notice of acceptance and the Form of Contract, the successful Bidder should sign and date the Contract, and return it to the Employer.

32. Performance Security

- 32.1 Together with the signed Contract, the successful Bidder will send to the Employer, the Performance Security in the amount indicated in *the Bid Data Sheet*.
- 32.2 If the successful Bidder fails to provide the performance security, or during 14 (Fourteen) days does not return the Contract signed, then the Employer shall reject the bid and confiscate the bid security, in that case the Employer shall award the Contract to the next evaluated Bidder, . whose bid is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily, subject to the Employer's right to reject all bids in accordance with Clause 29, and the applicable Law and Regulations.

33. Corrupt and Fraudulent Practices

- 33.1 The Employer requires that the Bidders observe the highest standards of ethics during the procurement and execution of such Contracts. In pursuance of this policy, the Employer:
 - (a) for the purposes of provisions of this Clause, uses the following notions:
 - I. "corrupt practice" means the offering, giving, the agreement requesting for remuneration in any form, or services rendering in order to influence the action of a public official in the procurement process or in contract execution; and
 - II. "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a Contract to the detriment of the Employer, including collusive practices among Bidders (prior to or after bid submission), to establish bid prices at artificial non-competitive level, and deprive the Employer of the benefits of free and open competition;

- III. "collusive practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of the Employer, designed to establish bid prices at artificial, noncompetitive levels; and
- IV. "coercive practice" means harming or threatening to harm (directly or indirectly), persons or their property to influence their participation in the procurement process or the execution of a contract;
- (b) will reject the bid if it determines that the Bidder recommended for award of the Contract has engaged in corrupt, fraudulent, collusive or coercive practices during the bidding process or execution of a contract;
- (c) will declare the Contractor for indefinite, or for a specified period of time to be ineligible to participate in the state-financed biddings in accordance with a Regulation on the establishment of Database of unreliable (unfair) suppliers and its application procedures.

34. Penalties

A penalty for slow or non-performance will be imposed as per the rate prescribed for Liquidated Damages. Slow or non-performance will be assessed against the project's approved work programme and will commence from the first quarter of the project life. (Note: This means that after 10 % of the contract sum is deducted for penalties, the Procuring Entity has the right to cancel the contract and demand all forms of damages).

Bid Data Sheet (BDS)

Below given the specific data on procurement of the works shall complement, supplement or amend the provisions of the Instructions to Bidders (ITB). Whenever there is a conflict between the provisions herein and the Instructions to Bidders, the former shall prevail.

Item №	A. General
	The Employer is: Guyana Power & Light Incorporated, 40 Main Street, Georgetown, Guyana.
	Identification Number GPL-PD-47-2020
	The works are :
	Lot 1 - Supply, Installation & Commissioning of a 10kWp Grid-Connected Solar Photovoltaic System at Organization of American States (OAS), the Ministry of Agriculture Building, Lot No. 18 Brickdamn, Stabroek, Georgetown
ITB 1.1	Lot 2 – Supply, Installation & Commissioning of a 20kWp Grid-Connected Solar Photovoltaic System at the Inter-American Institute for Cooperation on Agriculture (IICA), Ministry of Agriculture Building, Lot No. 18 Brickdamn, Stabroek,Georgetown
	Lot 3 – Supply, Installation & Commissioning of a (10)kWp Grid-Connected Solar Photovoltaic System with (12) kWh Battery Energy Storage System and a 5kW Hybrid Inverter at the Guyana Power and Light Inc., 257-259 Middle Street, South Cummingsburg, Georgetown
	The source of financing is: The Guyana Power & Light Inc.
	The intended completion date is Sixty (60) days after award of contract
	The defects liability period is Twelve (12) months after completion.
	To qualify for award of the Contract, the Bidders shall meet the following qualification criteria:
	(a) The bidder shall furnish documentary evidence to demonstrate that it meets the following requirements:
ITB 3.3	• Experience as a supplier and installer in carrying out five (5) or more solar PV systems of similar functional/technical characteristics and of a comparable scale within the last three (3) years. The firm should also demonstrate a capacity to field and manage a team with at a minimum of the following qualifications and expertise:
	Project Manager – a qualified/registered engineer or related discipline a) 5 years' proven experience in PV installation b) experience in electrical/solar design c) experience in similar projects within last five

	 years and of a comparable contract value. Licensed Electricians – a) 5 years' proven experience in the field b) experience in similar projects within last 5 years and of comparable contract value. Certified Installers – a) 5 years' proven experience in the field b) experience in similar projects within last 5 years and of comparable contract value. Volume of supplies of not less than G\$2,000,000 within last three (3) years including the value of each supply. (b) Bidder must provide a letter stating all ongoing projects. The letter must be dated within one month of the bid opening date and include the name of the contract, year of commencement, name of client, value of contract and completion percentage.
	B. Bidding Documents
	The Bidder shall submit the following additional documents in its bid:
ITB 7.1	 Documentary evidence that the goods are ISO certified and Tropic resistant; Documentary evidence that the PV modules comply with IEC 61215 for Crystalline Silicon PV Modules (or equivalent) standards, and that the inverters are UL 1741 listed; Documentary evidence to demonstrate that the Goods offered meet all the technical specifications of the bidding documents. Technical literature must include data sheets and specific technical information on each of the items of equipment and components proposed for the photovoltaic systems; A detailed schematic design layout for the systems, including explanatory notes for sizing of equipment and components that comprise the system, and energy production calculations using a PV modelling software; 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 systems; Documentary evidence that batteries comply with IEC 61427:1999 and the manufacturing process conformed to environmental management standard ISO 14001 An implementation schedule indicating important milestones such as equipment delivery, commencement & completion of installation, testing and commissioning. Manufacturer's Authorization is required and must be provided by the bidder. Three (3) years of after sales service is required and must be clearly stated in bid submission
	documents.

	For clarification purposes only, the Employer's address is :
	Attention : Amanda Harris-Logie
	Project Officer
	Address : 257-259 Middle Street,
ITB 8.1	Cummingsburg,
	Georgetown,
	Guyana.
	Telephone , 225 7020/227 4492 en 692 9202
	Telephone : 225-7929/227-4482 or 683-8302 Email : aharris-logie@gplinc.com
	A Pre bid meeting inclusive of the site visits will be held on 8th September
ITB 8.2	2020, 9:00 hrs (9:00am) at GPL 257-259 Middle Street, South Cummingsburg,
	Georgetown.
	C – Preparation of Bid
ITB 10.1	The language of Bid is English
ITB 11(c)	Delete "priced Bill of Quantities" and replace with "Schedule of Requirements"
ITB 12.1	Delete "priced Bill of Quantities" and replace with "Schedule of Requirements"
	ITB Sub- Clause 12.2 has been modified to read :
	"The Didden shall indicate the rates and prices for all hinds of works included in
	"The Bidder shall indicate the rates and prices for all kinds of works included in the Schedule of Requirements, drawings and specifications. The kinds of works
ITB 12.2	for which no rate and price is entered by the Bidder will not be paid for when
	executed, and it is considered that they are included in the rates and prices for
	other kinds of works."
ITB 13	The Bid Currency shall be in Guyana Dollars
ITB 14.1	The period of bid validity is 120 days
	A bid security of 2% of the tendered amount is required to be submitted with
	the bid.
ITB 15.1	The bid security shall be in the form of a bank guarantee or a guarantee or bond from a recognized Insurance Company. The original of the bid security
	must be submitted at the time of the bid opening.
ITB 16.2	Alternative bids will not be accepted for evaluation
ITB 17.1	Number of copies of the bid to be completed and returned are; One (1) Original
110 1/01	and One (1) Copy.
	D – Submission of Bids
	The Bidder shall seal the original and each copy of the bid in separate
ITD 10 1	envelopes, duly marking the envelopes as " ORIGINAL " and " COPY ." The
ITB 18.1	envelopes shall then be sealed in an outer envelope. The Bid envelope should contain three separate envelopes for each 'Lot" with
	the appropriate label. The envelopes shall then be sealed in an outer envelope.

ITB 18.3	Certificates of compliances from NIS,GRA and VAT Registration	
ITB 19.1	Deadline and place for submission of bids at the address: The Secretary to the Tender Board, Guyana Power & Light, 91 Duke Street, Kingston, Georgetown on or before <u>10:00hrs (10:00am) on 22nd September 2020</u>	
	E – Opening of Bids	
ITB 22	Bid opening is scheduled for 10:30hrs (10:30am) on 22 nd September 2020 in GPL'S Board Room, 91 Duke Street, Kingston in the presence of bidders/representatives who may choose to attend in person	
ITB 27	Sub clause 25.1, 27.1 and 27.2 applies. See Annex 7 - Evaluation Criteria	
	F – Award of Contract	
ITB 31.1	The amount of Performance Security shall be 10% of Bid Price, and in the form of Bank Guarantee, Manager's Cheque or Insurance issued from a local commercial bank within seven days of the signing of the contract. The bond shall be valid for the entirety of the contract period.	

General Conditions of Contract (GCC)

A. General provisions

1. Definitions

1.1 Below given terms in this Contract shall be interpreted as follows:

"Bill of Quantities" means the completed priced items of works and priced consumable materials which are the part of the Bid.

"The **Completion Date**" means the date of completion of the Works accepted by the Working Committee pursuant to Certificate of Commissioning, or in case of repair works, the final Certificate of Performed Works of the Contractor approved by the Engineer.

"**Contract**" means the Contract achieved between the Purchaser and the Contractor, and fixed as the form of Contract signed by the parties with all annexes and addenda to the Contract for the execution and completion of the Works.

"**Contractor**" means an individual or legal entity, or a partnership, whose Bid for the execution of the Works is accepted by the Purchaser.

"Contractor's Bid" means the completed bidding documents submitted by the Contractor to the Purchaser.

"**Contract Price**" means the amount to be paid to the Contractor under the Contract for the entire and duly performance of his contractual obligations.

"Days" mean calendar days; "months" mean calendar months.

"A **Defect**" means any part of the Works executed breaching terms of the Contract.

"The Acceptance Report of Corrected Defects" means the acceptance report drafted jointly by the Engineer and the Contractor after correction of defects by the Contractor.

"The **Defects Correction Period**" means the period to correct imperfections and defects indicated in the Special Conditions of Contract, and calculated from the Completion Date.

"**Drawings**" include all calculations, schemes, plans and other information provided, or approved by the Authorized Body for the execution of the Contract.

«**Compensation Events**» means the event defined in Clause 41 of the General Conditions of Contract.

"Employer" means the party, as defined in the SCC, which employs the Contractor to execute the Works.

"Machinery and equipment" mean all the Contractor's machinery, equipment and vehicles to be brought temporarily to the Site for the execution of the Works.

"**The Initial Contract Price**" means the Contract Price indicated by the Employer in the Letter of Acceptance.

"**The Expected Period of Completion**" means when the Contractor should complete the execution of the Works indicated in the SCC.

"**Materials**" means all consumable and raw materials to be used by the Contractor and subcontractor during the execution of the Works.

"**Plant**" means the integral part of the Works which has a mechanical, electrical, chemical or biological function.

"**Engineer**" means a competent person, identified in the SCC, appointed by the Employer to be the Engineer, and notified to the Contractor, to be responsible for supervising the execution and quality of the Works.

"Site" means the territory, as defined in the SCC, allotted for the execution of the Works.

"Technical Specification" means the technical specifications of the Works included in the Contract, and any modifications of, or addenda to these specifications approved by the Employer.

"The **Start Date**" means the latest date, as given in the SCC, when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

"A **Subcontractor**" means an individual or legal entity, entering into a Contract with the Contractor to execute the part of the Works under the Contract, including the work of the Site.

"Temporary Structures" means the structures designed, constructed, installed and dismantled by the Contractor, and which are required for the execution of the Works.

"**Modification**" means a written instruction given by the Engineer to modify quantity of the Works, or items.

"The **Works**" means that the Contractor should construct, install, and hand over to the Purchaser under the Contract the execution of quantity of the Works, or completion of the Works, as defined in the SCC.

2. Contract Documents

- 2.1 Below listed documents shall constitute the Contract, and shall be its integral part, and shall be interpreted in the following order of priority:
 - (a) Contract,

- (b) Letter of Acceptance,
- (c) Contractor's Bid,
- (d) Special Conditions of Contract,
- (e) General Conditions of Contract,
- (f) Technical Specifications,
- (g) Drawings,
- (h) priced Bill of Quantities, and priced Consumable Materials ; and,
- (i) any other documents listed in *the Special Conditions of Contract* to be as a constituent part of the Contract.

3. Language and Law

3.1 The language of the Contract and the applicable laws governing the Contract are stated in *the Special Conditions of the Contract.*

4. Engineer

4.1 Except where otherwise specifically stated, the Engineer will decide contractual relationships between the Employer and the Contractor, representing the Employer.

5. Official communication between the Employer and the Contractor

5.1 Official communication between the parties under the implementation of the Contract conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.

6. Entering into subcontract

6.1 The Contractor may enter into subcontracts with the approval of the Engineer, but may not assign the Contract without the approval of the Employer in writing. In case of entering into more than one Contract with subcontractors, the Contractor shall co-ordinate the activities of those subcontractors. Presence of subcontractors shall not alter the Contractor's liability for performance of the contract.

7. Personnel

- 7.1 The Contractor shall employ the personnel for key positions in order to perform the functions specified in the «Qualification Information». The Engineer shall approve any proposed replacement of the key personnel only if their relevant qualifications and skills are the same or better than those of the personnel listed in the Qualification Information».
- 7.2 If for any reason the Engineer asks the Contractor to remove the person who is a staff member or employee of the Contractor or subcontractor, the Contractor should ensure that this person leaves the Site within three days, and no longer be engaged in the work under this Contract.

8. Employer's and Contractor's Risks

8.1 The Employer and the Contractor carry the risks which are the Employer's risks or the Contractor's risks under this Contract.

9. Employer's Risks

- 9.1 From the Start Date and until the Completion Date, or until the defects have been fully corrected, the following risks will be the Employer's risks:
 - (a) The risk of personal injury, or, death, or loss of or damage to property (exclusive of the Works, Plant, Materials, Machinery and Equipment) in consequence of:
 - (i) using or occupying the Site by the Purchaser for the execution of the Works, or for other purposes which may be an unavoidable result of the Works or
 - (ii) negligence, improper fulfillment of official duties, or violation of legal rights of the Contractor by the Purchaser, or by any person employed by him, or under the Contract, exclusive of the Contractor.
 - (b) The risk of damage to the Works, Plant, Materials, and Machinery and Equipment to the extent that is due to a fault of the Employer, or in the Employer's design defect, or due to war or radioactive contamination directly affecting the country where the works are to be executed.
- 9.2 From the Completion Date and until the defects have been fully corrected, the risk of loss of or damage to the Works, Plant and Materials is the Employer's risk, exclusive of the cases when loss or damage caused by:
 - (a) the defect which existed on the Completion Date;
 - (b) the event which occurred before the Completion Date and which is related to the Employer's risks, or
 - (c) the activities of the Contractor on the Site after the Completion Date.

10. Contractor's Risks

10.1 From the Start Date and until the defects have been corrected, the risk of personal injury, death, and loss of or damage to property (including the Works, Plant, Materials, Machinery and Equipment) which are not the Purchaser's risks are the Contractor's risks.

11. Contractor to Execute the Works

11.1 The Contractor shall construct and install the Plant in accordance with the Specifications, Drawings, Bill of Quantities and/or pursuant to the Defects Report.

12. The Works to Be Completed by the Expected Period of Completion

12.1 The Contractor may begin the execution of construction Works from the Start Date, and he should execute the Works in accordance with the Work Execution Schedule submitted by the Contractor and approved by the Engineer, and the Contractor must complete the construction Works by the Expected Period of Completion.

13. Construction of Temporary Structures

- 13.1 The Contractor shall submit to the Engineer the specifications and drawings indicating the expected construction of Temporary structures to be approved by the Engineer, provided that they comply with the Specifications and drawings.
- 13.2 The Contractor should, when required, co-ordinate the project of Temporary structures with the third party.

14. Accident Prevention

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

15. Discoveries

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

16 Investigation and Use of Site

- 16.1 During the execution of the Works, the Contractor shall rely on the Site Investigation Reports, and may visit and investigate the Project Site. All information obtained by the Contractor during the Site visit, shall be used for the execution of the Works.
- 16.2 The Employer shall give the Contractor the right for using the whole Site which is allotted for project construction. If the right for using any part of the Site is not given by the date indicated in *the Special Conditions of Contract*, the Employer will be deemed to have delayed the start of the certain kinds of project works, in this case the Purchaser should extend the construction period for the period of transferring the Site.

17. Access to the Site

17.1 The Contractor shall allow the Engineer and any other person authorized by the Engineer, access to the Site or to any other place where work is being carried out or is expected to be carried out according to the Contract.

18. Orders and instructions

18.1 The Engineer, within his authority, may take a decision; give orders and instructions to be binding upon the Contractor.

18.2 If the Contractor assumes that decision taken by the Engineer exceeds the authority presented by the Engineer under the Contract, or decision was taken wrong, it shall be dealt with under clause 19.

19.0 Dispute or disagreement arising between the Employer and the Contractor shall be settled in accordance with the Laws of Guyana.

19.1 Notwithstanding any references to trial herein, the parties shall continue to perform their obligations under the Contract, unless otherwise agreed.

B. Time Control

20. Work Execution Schedule

- 20.1 Within the time period specified in *the Special Conditions of Contract*, the Contractor shall submit to the Employer for approval the Work Execution Schedule where general methods of arrangement, procedure and period of execution of works on the Project construction are stated.
- 20.2 The Contractor shall submit, within the time periods specified in *the Special Conditions of Contract* to the Engineer for approval, the updated version of the Work Execution Schedule, taking into account the actual progress of performed works, and its impact on the time period of remaining works, including available changes in the sequence of execution of the works.
- 20.3 If the Contractor does not submit the updated Work Execution Schedule during the indicated period, the Engineer may retain the amount specified in *the Special Conditions of Contract* from the next Certificate of Performed Works, and continue to retain that amount until the delayed Work Execution Schedule is provided.
- 20.4 The Engineer's approval of the Work Execution Schedule shall not alter the Contractor's obligations. The Contractor may revise the Work Execution Schedule, and submit it to the Engineer again at any time. The revised Work Execution Schedule should demonstrate the effect of Modifications and Compensation Events.

21. Delays Ordered by the Engineer

21.1 The Engineer has a right to give order to the Contractor to suspend the start or progress of execution of the works on the Project construction.

22. Early Warning

- 22.1 The Contractor shall inform the Engineer as soon as possible of likely specific events, or circumstances that may negatively affect the quality of the works, increase the Contract Price or delay the execution of the Works on the Project construction. The Engineer may require the Contractor to assess the expected impact of the future event or circumstance on the Contract Price and Completion Date. The Contractor should provide such assessment within a short time.
- 22.2 The Contractor shall assist the Employer in preparing and analyzing proposals regarding for that how to the consequence of such an event or circumstance can be avoided or reduced by anyone involved in the work, and in carrying out any instruction of the Engineer resulting from those proposals.

C. Quality Control

23. Identifying Defects

- **23.1 The** Engineer shall check the works of the Contractor and notify the Contractor of the defects found. Such checking shall not involve the change in the Contractor's responsibilities. The Engineer is entitled to require the Contractor to search for a defect, and to uncover and check the results of works that the Engineer considers may have a Defect.
- **23.2** The "**Defects Liability Period**" for the work is **10 months** from the date of taking over possession or such other period as may be specified in the Bid Data Sheet.

24. Tests

24.1 If the Engineer instructs the Contractor to carry out tests not provided for in the specifications to check whether the performed work has a defect, and if as a result the test shows that it does, the Contractor shall pay for the test. If there is no defect, the payment for the test shall be done by the Purchaser and it shall be a Compensation Event.

25. Correction of Defects

25.1 The Engineer should notify the Contractor in writing of any defect before completion of the Defects Correction Period, which begins at Completion Date, and its duration is determined in *the Special Conditions of Contract*.

25.2 Upon receipt of each notice of Defect, the Contractor should correct the indicated Defect within the time period specified in the Engineer's notice.

26 Uncorrected Defects

26.1 In case if the Contractor has not corrected the Defect within the time period specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor should pay those costs.

D. Cost Control

27. Bill of Quantities

27.1 The Bill of Quantities includes the priced kinds of works and value of consumable material for the construction, installation, testing and commissioning of the Works to be executed by the Contractor.

27.2 The Bill of Quantities in the bid is used for calculation and payment for the Contract Price. The Contractor shall receive the payment for the executed amount of works at the rate and price, and value of consumable materials indicated in the Bill of Quantities for each kind of work.

28. Changes in Quantities

28.1 In exceptional circumstances, the Employer, as may be industrially required, may change quantity of any works, or individual kinds of works.

28.2 At the request of the Employer, the Contractor within 7(seven) days of receipt of request should provide the Employer with a detailed breakdown of prices of change in the quantities indicating the rates for kinds of works and value of consumable material. The Employer shall evaluate those rates and value of consumable material in comparison with the Bill of Quantities provided by the Contractor with his Bid.

28.3 In case if during the comparison, the rate and value of consumable material will correspond with the rate and value of consumable material given in the Bill of Quantities, the Employer shall issue the Contractor a "Work order" for the execution of changed quantities.

28.4 If the rate and value of consumable material shall not correspond with the rate and value given in the Bill of Quantities, or if in the Employer's judgment, shall be unreasonable, the Employer instructs the Engineer to prepare a budget for Changed quantities, or for individual kinds of works, and on the basis of his own forecast, issues the Contractor a budget in the Work order format to execute for changed quantities.

28.5 The Contractor does not have a right for additional payment as a compensation of expenditure which one might avoid by giving an early notice.

29. Certificate of Performed Works

- 29.1 The Contractor shall monthly submit to the Engineer for payment the certificates of actually performed works prepared pursuant to the Bill of Quantities after deduction of aggregate payments of previously approved quantities.
- 29.2 The Engineer should check the Contractor's monthly certificates of performed works and approve them for payment to the Contractor.
- 29.3 The value of performed works should be determined by the Engineer, and should involve the value of all actually performed quantities in accordance with items of works, rates and value of consumable material under the Bill of Quantities.
- 29.4 The value of performed works should include the value of Work order (additional works) and of Compensation Event.

29.5 The Engineer may exclude, based on subsequent circumstance, any items certified in a previous certificate of performed works for payment, or reduce the proportion of any item previously certified in any certificate of performed works for payment in the light of later information.

30. Payments

- 30.1 Payments shall be adjusted for deductions for advance payments and retention. The Employer shall pay the Contractor sums according to the certificates of performed works confirmed by the Engineer during 28 days after the date of invoicing pursuant to the certificate of performed works. In case when the payment is delayed, the Employer shall pay interest to the Contractor indicated in *the Special Conditions of Contract* against the delayed payments. Interest is calculated from the date by which the payment should be made and until the date when the last payment has been made.
- 30.2 In case if the cost of certificate of performed works is increased as a result of decision of Arbitrator or Judge of General Jurisdiction, interests will be charged from the date of affirmation by the Engineer of the certificate of performed works for which the quantities have been increased without any dispute.
- 30.3 The kinds of Works for which no rate or price, and value of consumable material is entered in will not be paid for by the Employer, and shall be deemed included in other kinds of Works.

31. Retention

- 31.1 For the purposes of correction of possible defects, the Employer shall retain from each payment a portion of the funds in the sum of 10 % of the contract sum is paid only at the expiration of Defects Liability period
- 31.2 On the Completion Date half of the whole retention shall be returned to the Contractor and the second half shall be returned after completion of the Defects Correction Period, provided that all Defects indicated in the notice and certified by the Engineer have been corrected.
- 31.3 After entire completion of Works, the Contractor may substitute retention money with an "on demand" bank guarantee.

32. Liquidated Damages.

- 32.1 In case of a failure in the Completion Date towards the Expected Period of Completion, the Contractor shall pay the Purchaser liquidated damages specified in the *Special Conditions of Contract* for each date of delay of the actual Completion Date against the Expected Period of Completion. The total amount of liquidated damages shall not exceed the amount specified in the *Special Conditions of Contract*. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities. *Thereafter the procuring entity has the right to cancel the contract and demand all forms of damages*.
- 32.2 In case of extension of the Expected Period of Completion after liquidated damages have been paid, the Engineer shall repay the overpaid amount of liquidated damages by the Contractor at the expense of next certificate of performed works.

33. Force majeure

- 33.1 The Contractor shall not forfeit his performance security, and shall not be responsible for payment of liquidated damages, or termination of a Contract for disregard of provision, if the delay in execution of the Contract, or default is the result of an event of force majeure.
- 33.2 For the purposes of this Clause, "force majeure" means an event beyond the control of the Contractor, not connected with error or negligence of the Contractor, and not foreseeable. Such events may include but not restricted to such actions as: wars or revolutions, fires, floods, epidemics, quarantine and embargo affecting the execution of the Works.
- 33.3 When force majeure arises, the Contractor shall promptly notify the Engineer in writing of Such event and its cause. If no written instructions received from the Engineer, the Contractor shall continue to perform his obligations under the Contract as far as possible, and shall search for alternative ways of execution of the Contract, irrespective of force majeure.

34. Mobilization or Advance Payment

- 34.1 The Employer shall make advance payment to the Contractor in the amount and within the dates specified in *the Special Conditions of Contract*, provided that a Bank Guarantee for advance payment for the amount of advance have been provided by the Contractor. The Guarantee shall remain in force until the full repayment of advance; in this case the amount of the Guarantee should be progressively reduced by the amounts repaid by the Contractor. Interest will not be charged on advance payments.
- 34.2 The Contractor shall use the advance payment exclusively to pay for Plant, Machinery, and Equipment, Materials and other expenses required directly for the execution of the Contract. The Contractor shall demonstrate that advance payment has been used for the purposes of execution of the Contract by supplying copies of invoices or other documents.
- 34.3 The advance payment shall be repaid by deducting proportionate amounts from the Certificate of performed works that are due to the Contractor. No account shall be taken of the advance payment or its repayment in assessing valuations of performed works, Modifications, Compensation Events, Bonuses or Liquidated Damages.

35. Performance Security

- 35.1 Within seven (7) days upon receipt of notice of award, the successful Bidder shall furnish the Employer with the Performance Security, the amount and form of which is specified in the *Special Conditions of Contract*.
- 35.2 The Performance Security shall be returned by the Employer not later than fifteen (15) days after the date of completion by the Contractor of his obligations under the Contract, including all guarantee obligations, unless otherwise provided in the Special Conditions of Contract.

36. Cost of Repairs

36.1 Loss of or damage to the Works, Plant, or Materials included in Works and having been occurred between the Start Date and the Completion Date, including the Defects Correction Period shall be reimbursed by the Contractor at the Contractor's cost if that loss or damage arose as a result of the Contractor's action or inaction.

E. Finishing the Contract

- 37. Completion37.1 The Contractor, after completion of all works stipulated in the Contract, shall send the Employer a notice of Completion and shall request the Engineer to issue a certificate of Completion of the Works
- **38 Taking Over** 38.1 The Employer not later than seven (7) days after the Contractor's notice, shall appoint the Working Commission to take over the Works. The Taking Over Certificate shall be prepared with participation of the Contractor. The date of approval of Taking Over Certificate by the Employer shall be deemed the Completion Date, and within seven (7) days of the date of taking over certificate, the Site and the Works should be taken over by the Purchaser.
- 39.Final Account
 39.1 After the Certificate of Corrected Defects, the Contractor shall supply the Employer with a final account for the remaining amount that the Contractor considers payable under the Contract. Provided that all defects are corrected, and that the supplied invoice is correct and complete, the Engineer, during one month, shall certify the final certificate of performed works. If during the inspection, there will be the facts of finding a defect, and the supplied invoice is incorrect or inaccurate, the Engineer, within a month, shall submit a schedule for correction of defects. If the Final Account is still incorrect or inaccurate after it has been resubmitted, the Engineer shall determine independently the amount due to and shall decide to pay to the Contractor.
- **40. Termination** 40.1 The Purchaser or the Contractor may terminate the Contract if the other party causes a fundamental breach of the conditions stipulated in the Contract.
 - 40.2 Fundamental breaches of the Contract conditions shall include, but shall not be limited to, the following:

(a) the Contractor stops the works for 15 days, in this case that stoppage is not provided in the current Work Execution Schedule and is not authorized by the Engineer;

(b) The Purchaser instructs the Contractor to suspend the progress of the works, and such instruction is not canceled during the days specified in the Special Conditions of Contract; (c) The Employer or the Contractor becomes bankrupt or goes into liquidation, exclusive of reorganization or amalgamation;

(d The Employer does not pay the Contractor the amount confirmed by the Engineer within the days specified the Special Conditions of Contract of the date of invoice supplied to the Contractor for payment;

(e) the Engineer notifies and warns that non-correction of a specific defect is a fundamental breach of the Contract conditions; and the Contractor does not correct a defect within acceptable period of time established by the Engineer;

(f) The Contractor does not provide the required guarantee;

(g) The Contractor delayed the completion of the Works for a number of days correspondent to a maximum possible amount of liquidated damages as indicated in the *Special Conditions of Contract*.

(h) If the Contractor, in the Employer's judgment, has engaged in corrupt or fraudulent practices in the process of competitive selection or execution of the Contract.

For the purposes of this subparagraph:

(1) "corrupt practice" means the offering, giving, the agreement requesting for remuneration in any form, or services rendering in order to influence the action of a public official in the procurement process or contract execution; and

(2) "fraudulent practice" means a misrepresentation of facts in order to influence the procurement process or execution of a contract to the detriment of the Purchaser; including a collusive practice of bidders (prior to or after bid submission) to establish bid prices artificially at non-competitive level, and deprive the Purchaser from benefits of free and open competition;

(3) "collusive practice" means a scheme or arrangement between two or more contractors (subcontractors), with or without the knowledge of the Purchaser, designed to artificially rise the price in during the execution of a contract;

(4) "coercive practice" means harming or threatening to harm (directly or indirectly), persons or their property to influence their participation in the execution of a contract;

40.3 When either party of the Contract notifies the Engineer of

breach for a cause other than those listed under Clause 45.2 above, the Engineer shall determine whether the breach is fundamental or not.

- 40.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 40.5 If the Contract is terminated, the Contractor shall stop the Works immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.
- 41. Payment upon Termination
 41.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue the confirmed Certificate of the performed works and Materials ordered less advance payments received up to the date of the confirmation of the certificate and less the percentage of unperformed works, as indicated in the Special Conditions of Contract. Additional Liquidated Damages shall not be charged. If the total amount due to the Employer exceeds the amount due to the Contractor, the difference shall be a debt of the Contractor to the Purchaser.
 - 41.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Purchaser, the Engineer shall confirm the Certificate of the performed works, 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 confirmation of the certificate.
- **42. Property** 42.1 All Materials on the Site, Equipment, Temporary Structures, and Works shall be deemed the property of the Employer if the Contract is terminated because of the Contractor's fault.
- **43 Release from** 43.1 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 Engineer shall certify the impossibility of the Contract performance. The Contractor shall make the Site safe and stop work as quickly as possible after receiving such notice, and shall be paid for all work carried out before receiving an instruction, and for any work carried out afterwards to which a commitment was made.
- 44. Contractor to Protect Works Done, Materials and Plant
 44.1 The Contractor should provide the protection of performed works and all materials, plant, resources and other items related to the Works from any or all kinds of damage, deterioration, destruction linked to rain, frost, fire, robbery, mysterious disappearance and other reasons. The Contractor during the execution of the works, shall additionally ensure the protection of other works on Project, and of property belonged to the Employer, and related structures from any damage, deterioration

or for any other reason, including (but not limited to these) roads, buildings, warehouses and other kinds of movable and immovable property, exclusive of the event of force majeure. All costs incurred by the Contractor in view of the above-stated, shall not be subject to additional payment on the part of the Employer.

- 44.2 The Purchaser will not be responsible for any damage to the Contractor's works for the abovementioned reasons before they are fully completed and accepted, and the Contractor shall, without additional payment, carry out all corrections, repairs or replacements as applicable to the Works because of necessity to correct any defect, damage and other defects as a result of the above event.
- 45. Materials and Equipment of supply, transportation, discharge and storage of all Materials and Equipment to be supplied, and delivered by the Contractor to the Project Site. The supplies shall be carried out only for the Contractor's name. The Employer shall in no case be responsible for expenses related to the supply, processing, storage and fee for stoppage of vehicle. No supplies shall be addressed to the Employer.
 - 45.2 The Contractor shall provide the Employer with a Schedule of Receipt of materials and equipment on the Project Site. The sites only permitted by the Purchaser may be used for storage, stowage and stockpiling.

Special Conditions of Contract (SCC)

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict between the provisions herein and the General conditions of Contract, the Special Conditions of Contract shall prevail.

GCC Clause name	A. General
1.1	The Employer is: Guyana Power & Light Incorporated 40 Main Street, North Cummingsburg, Georgetown
	The Supplier is
	(indicate full name, legal address, phone, fax and e-mail of Supplier)
	The works are is the following:
	 Lot 1 - Supply, Installation & Commissioning of a 10kWp Grid-Connected Solar Photovoltaic System at Organization of American States (OAS), the Ministry of Agriculture Building, Lot No. 18 Brickdamn, Stabroek, Georgetown Lot 2 - Supply, Installation & Commissioning of a 20kWp Grid-Connected Solar Photovoltaic System at the Inter-American Institute for Cooperation on Agriculture (IICA), Ministry of Agriculture Building, Lot No. 18 Brickdamn, Stabroek, Georgetown Lot 3 - Supply, Installation & Commissioning of a (10)kWp Grid-Connected Solar Photovoltaic System with (12) kWh Battery Energy Storage System and a 5kW Hybrid Inverter at the Guyana Power and Light Inc., 257-259 Middle Street, South Cummingsburg, Georgetown
1.1	The Intended Completion Date is Sixty (60) days after award of contract
1.1 1.1	The Officer is the Project Officer of the GPL Project Management Department The Sites are located at :
1.1	 Lot No. 18 Brickdamn, Stabroek, Georgetown 2. 257-259 Middle Street, South Cummingsburg, Georgetown
1.1	The Start Date shall be Seven (7) days after the Notice to Proceed is issued to The
2.1 (h)	Contractor. Delete "Bill of Quantities" and replace with "Schedule of Requirements"
3.1	The Language of the Contract is English
3.1	The Applicable Law for this contract is The Laws of Guyana
10.1	The minimum insurance amounts and deductibles shall be:

	(a) For the Works, Plant and Materials: C\$1 300,000
	(a) For the Works, Plant and Materials: G\$1,300,000 (b) For the loss or demoge to Equipment: G\$1 300,000
	(b) For the loss or damage to Equipment: G\$1,300,000
	(c) For loss or damage to property(except the Works, Plant Materials and
	equipment) in connection with the Contract: G\$1,500,000
	(d) For personal injury or death:
	(i)Of the Contractor's employees: G\$1,000,000
	(ii)Of other people: G\$1,000,000
14.1	The safeguard/ safety at the site, The Contractor shall either;
	1. Provide safety gear which should be worn by workers whilst works are ongoing.
	2. Agree to abide with GPL safety plan for works on site as such the Contractor will be responsible for obtaining a copy from GPL Inc.
16.2	The date by which the Site has been transmitted to Contractor for use shall be the
	same date as the "Notice to Proceed"
19.0	Disputes or disagreement arising between the Employer and the Contractor shall be
	settled in accordance with the Laws of Guyana
20.1	B. Time Control
20.1	The Contractor shall submit for approval a Work Program within Seven (7) days from the date of the Letter of Acceptance.
20.2	The period of submission of updated Work Program – within seven (7) working days
	by request of Officer
20.3	The retention of untimely submission of Work Programme is \$10,000 Guyana
	Dollars per day
	C. Quality Control
23.2	The Defects Liability Period is Twelve (12) Months
26.1	Any correction of Defects must commence within fourteen (14) days of receipt of Officer's Notice
	D. Cost Control
27.1	GCC Sub- Clause 27.1 has been modified to read :
	"The Schedule of Requirements shall contain items for the construction, installation, testing and commissioning work to be done by the contractor."
	testing and commissioning work to be done by the contractor.
27.2	GCC Sub- Clause 27.2 has been modified to read :
	"The Schedule of Requirements is used to calculate the Contract Price. The contractor
	is paid for the quantity of the work done at the date in the schedule of requirements for
	each item"
29.1	GCC Sub Clause 29.1 has been modified to read:
	"The contractor shall submit to the officer for payment, the certificate of performed
29.2	works pursuant to the payment schedule outlined in 30.1" Not applicable
29.2	Not applicable
H /10	

29.4	Not applicable
29.5	Not applicable
30.1	GCC Sub Clause 30.1 has been modified to read :
	Payment Form shall be in Guyana dollars in the following manner:
	 (a) Ten percent (10%) of the contract price within 14 days of signing the contract. (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 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 defect's liability period baring the correction of defects.
	The Employer shall pay the Contractor sums according to the certificates of performed works confirmed by the Officer during 28 days after the date of invoicing pursuant to the certificate of performed works.
	The Employer shall pay a rate of 0.02% interest of Certificate of Performed works
21.1	when a payment is delayed beyond 28 days.
31.1	Retention Not applicable
32.1	Liquidated Damages
5211	The penalty to be paid by the Contractor for delay of the completion of works is 0.5% per day to a maximum of 5% of the Contract Sum
34.1	Mobilization/ Advance Payment
	The advance payment will be 10% of the contract price which is mentioned in the payment schedule in 30.1. Note that the advance payment will not be required to be repaid by the Contractor.
34.3	Not applicable
35.1	A Performance Security is required in the amount of 10% of Contract Price
	and be in the form of a bank guarantee or Manager's Cheque.
	E. Finishing the Contract
40.2 (b)	When a suspension order is not revoked by the Employer after 30 days
40.2 (d)	When payment to the Contractor is delayed beyond 30 days following invoicing
40.2 (g)	The maximum number of days of delay is: 30 days; consistent with clause 32.1 on
_	liquidated damages].

Schedule of Requirements

Bidders are required to conduct site visits to determine the placement of the various components and interconnection parameters.

Projec	t Title/No: OAS			
Lot # 1	Brief Description of Goods	QTY Pla Del		Supply, Installation, Commissioning Schedule 60 days as of 2020 (signing of contract)
	General Note All rates must include for transportation, materials, labour, machinery and equipment, taxes, overheads and profits. <u>PV Array – 10kWp</u> Supply, Install, connect and operate Monocrystalline or Polycrystalline PV Modules with all material needed to have complete job ready for installing high quality PV Modules with	To be determined by bidder	INSERT LOCATION & ADDRESS at	Bidders to clearly state here, their offered delivery time
	total arrays capacity to achieve kWp Grid Connected Inverters – 10 kW or above			
	Supply, install, connect and operate DC/AC grid tie inverter that matches GPL's supply. Inverter must have data communication unit with Ethernet connection.	To be determined by bidder		
	PV Mounting Structure	To be determined by bidder		
	DC Cabling and Miscellaneous PV System/Generator Load Sharing Module	To be determined by bidder		
	Web Based Monitoring System	To be determined by bidder		
	42 Inch Smart TV	1 (One)		
	Installation and Commissioning			

Lot # 2	Brief Description of Goods	QTY	Place of Delivery	Supply, Installation, Commissioning Schedule 60 days as of2020 (signing of contract)
	General Note All rates must include for transportation, materials, labour, machinery and equipment, taxes, overheads and profits.		INSERT LOCATION & ADDRESS at	Bidders to clearly state here, their offered delivery time
	PV Array – 20kWp Supply, Install, connect and operate Monocrystalline or Polycrystalline PV Modules with all material needed to have complete job ready for installing high quality PV Modules with total arrays capacity to achieve kWp	To be determined by bidder		
	Grid Connected Inverters – 20 kW or above Supply, install, connect and operate DC/AC grid tie inverter that matches GPL's supply. Inverter must have data communication unit with Ethernet connection.	To be determined by bidder		
	PV Mounting Structure	To be determined by bidder		
	DC Cabling and Miscellaneous	To be determined by bidder		
	PV System/Generator Load Sharing Module	To be determined by bidder		
	Web Based Monitoring System	To be determined by bidder		
	42 Inch Smart TV	1 (One)		
	Installation and Commissioning			

	ct Title/No: GPL			1
Lot # 3	Brief Description of Goods	QTY	Place of Delivery	Supply, Installation, Commisioning Schedule 60 days as of 2020 (signing of contract)
	General Note All rates must include for transportation, materials, labour, machinery and equipment, taxes, overheads and profits.		INSERT LOCATION & ADDRESS at	Bidders to clearly state here, their offered delivery time
	PV Array – 10kWp Supply, Install, connect and operate Monocrystalline or Polycrystalline PV Modules with all material needed to have complete job ready for installing high quality PV Modules with total arrays capacity to achieve kWp	To be determined by bidder		
	Grid Connected Inverters – 10 kW or above Supply, install, connect and operate DC/AC grid tie inverter that matches GPL's supply. Inverter must have data communication unit with Ethernet connection.	To be determined by bidder		
	Hybrid Inverter – 5kW	To be determined by bidder		
	Lithium Battery Energy System – 12kWh	To be determined by bidder		
	PV Mounting Structure	To be determined by bidder		
	DC Cabling and Miscellaneous	To be determined by bidder		
	PV System/Generator Control Module	To be determined by bidder		
	Web Based Monitoring System	To be determined by bidder		
	42 Inch Smart TV	1 (One)		
	Installation and Commissioning			

TECHNICAL SPECIFICATIONS

1. General

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

1.1 Supplying, installing and commissioning of the following :

Lot 1 - Supply, Installation & Commissioning of a 10kWp Grid-Connected Solar Photovoltaic System at Organization of American States (OAS), the Ministry of Agriculture Building, Lot No. 18 Brickdamn, Stabroek, Georgetown

Lot 2 – Supply, Installation & Commissioning of a 20kWp Grid-Connected Solar Photovoltaic System at the Inter-American Institute for Cooperation on Agriculture (IICA), Ministry of Agriculture Building, Lot No. 18 Brickdamn, Stabroek, Georgetown

Lot 3 – Supply, Installation & Commissioning of a (10)kWp Grid-Connected Solar Photovoltaic System with (12) kWh Battery Energy Storage System and a 5kW Hybrid Inverter at the Guyana Power and Light Inc., 257-259 Middle Street, South Cummingsburg, Georgetown

- 2. Provide all technical documentations including user and operational manuals to GPL. 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. Mounting Structure
 - 3. Grid-connected Inverter
 - 4. Hybrid Inverter
 - 5. Batteries
 - 6. Monitoring System
 - 7. Schematic Diagram in accordance with NEC 2014 Article 690 and NEC 705
 - 8. Smart TV

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.

Provide 3 years after sales services to GPL. Bidders must provide a statement indicating its acceptance or otherwise of this requirement.

3. 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

4. Site Location

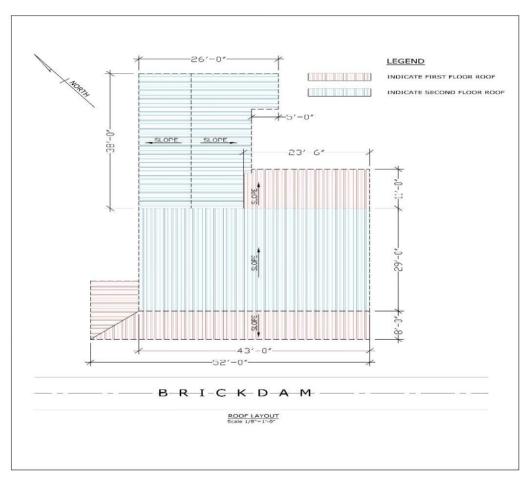


Figure 1: Aerial Image Ministry of Agriculture Building, Lot No. 18 Brickdamn, Stabroek, Georgetown – Lots 1 and 2

5. Existing Power Supply Conditions

The facility at which the Solar Photovoltaic System will be installed is a new building and the electrical schematic diagram can be seen below. The equipment shall be suitable for installation and integration with a system having the electrical parameters given.

As shown in the **Figure 2** below, the OAS/IICA building has a back-up generator and as such, the supplier must ensure that the grid tied system is sufficiently isolated when generator is energized (in the event of a power outage) or provide an adequate load sharing mechanism to synchronize the grid tied PV system with the generator. In the event of the latter, such a load sharing system must be priced on a separate line in the price schedule. This will be evaluated with and without this option.

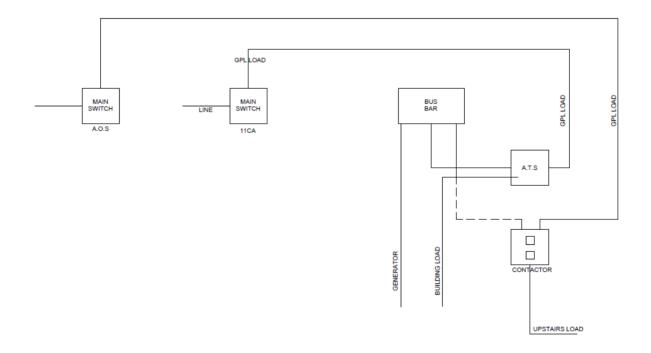


Figure 2: Electrical Systems Layout of the Ministry of Agriculture Building, Lot No. 18 Brickdam, Stabroek, Georgetown – Lots 1 and 2

Bidders are required to visit the site to determine appropriate inverter(s) selection and

obtain any other information required to prepare their bids.

6. Specification of required hardware

5.1 General Remarks

It is pointed out that the whole system should be designed in such a way that all components are sufficiently 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.

6.2 Photovoltaic Modules

- PV modules should be in accordance with international standards (IEC 61215, IEC 61730, IEC 61701, UL1703 etc.) and the National Electrical Code 2014 Article 690;
- 320 watts or greater rated solar modules totaling 40kWp or higher
- All modules should be made of crystalline silicon solar cells
- All PV modules shall show the same capacity;
- The Manufacturer should be internationally recognised
- Provide references and certificates on module testing.
- MC4 connectors for all Modules
- 20 years warranty on Modules

4.3 Mounting structure for PV Modules

- The PV modules mounting structure must accommodate the PV modules supplied.
- The mounting structure is rooftop mounted.
- 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).
- Adequate spacing, about 4 to 6 inches, between the surface and PV mount frame shall be considered to allow air circulation to cool the module back sheet.
- 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.
- Mounting of the PV Array shall be done in such a way as to not cause destruction of the roof surface or the shed. Adequate and appropriate means of preventing leaks and damage to the roofing materials must be utilized. Provisions must be made to retain the structural integrity of the roof surface.
- The use of a ballasted mounted or other Solar PV Array Mounting mechanism which does not require penetration or otherwise destruction of the roof surface is required.

4.4 Grid connected Inverters

- The minimum size of each Inverter shall be 5 kW or above and totaling a minimum between 90% and 100% the solar array name plate capacity
- Master/Slave or String type
- Grid Connection Voltage Based on the utility connection at the site
- 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);
- Automatic disconnect from the grid in case of need (see/check requirements of GPL);
- Capability of connecting monitoring devices;
- Ground fault monitoring / grid monitoring.
- Safety measures (EN 61000, EN 60950and others).
- Interface to the main grid (switchboard including manual disconnection device).
- Ten years' warranty

4.5 Hybrid Inverter

- The minimum size of each Inverter shall be 5 kW or above and totaling a minimum between 20% and 25% greater than the total grid-connected inverter capacity.
- Master/ Slave or String Type;
- Minimum 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;
- Grid Connection Voltage **Based on the utility connection at the site;**
- 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 61.7 (Field Selectable);
- Pure Sine Wave;
- Automatically transfers between inverter power and incoming AC power source;
- Compatible battery types Flooded, Gel, AGM, Li-ion;
- Indications of status of operation (e.g. LED);

- Over voltage and under voltage protection;
- Over-temperature protection;
- Overload protection;
- Short circuit protection.

4.6 Battery Energy Storage System (Lithium Technology)

- Supply and installation of 12kWh of energy storage system.
- Batteries should be deep cycle type and rechargeable;
- Lithium Ion/Iron technology;
- Capable of a minimum of 80% depth of Discharge
- Designed for renewable energy applications specifically for hybrid application;
- Battery ampacity must be such that it can supply 12kWh at a 0.5C (C/2) discharge rate.
- 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;
- 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:
 - o UL 1989
 - IEC 61427:1999
 - o UL 2054
 - 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 or power failure occurs minimising the amount of energy used from the utility grid and the generator set, where installed. 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 Schematic Diagram

A detailed system schematic design layout of all components and how they interconnect with each other and the existing building wiring must be provided in accordance with NEC 2014 Article 690 for each building. The contractor is responsible for all interconnections, including the grid interconnection, therefore all the hardware required for successful interconnection must be provided by the contractor.

4.8 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 visit to the site**.
- Appropriate size AC Interconnecting cables. The distance from the location of the inverters to the main switchgear is to be **decided upon visit to the site** by the Bidder.

4.9 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 utility and 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 and solar, total energy consumption of the building from the utility 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

Bidders are responsible for connecting the monitoring system via wireless fidelity (Wi-Fi) or cable to the existing network of the facility. All required materials are to be provided by bidders.

4.10 Smart TV

Information/data being generated by the monitoring system must be displayed on the Smart TV on each of the premises via HDMI or internet. Smart TV should meet the following requirements:

• Screen Size – 42 Inches

- Cabinet Type Slim Bezel
- Panel Type LED
- Smart Internet Function Yes
- HDMI Inputs 2
- USD inputs- 1
- Wifi Yes
- Warranty 12 months

4.11 Energy Management System

The energy storage management system shall be capable of (but not limited) 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

5. Specification of Required Services

5.1 Systems Design

Bidders are required to visit the site and assess the selected/proposed locations for the complete system, voltage and phase requirements for inverters and to become acquainted with the site for the installation of the system. A Schematic diagram is available for the electrical layout of the facility, included under the Existing Power Supply Conditions section. A *detailed schematic diagram of the proposed solution within the confines of the site 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 inverters, controllers, energy storage system, switch gears and busbars.

5.2 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 systems to the utility grid. 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 5 ohms or less. The minimum size copper grounding rod to be use is 5/8inch x 8 feet for the solar PV installation.
- c) The GEI also requires that the contractor applies and pays for an independent inspection certificate of the completed installation. 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. All materials required for this task must be provided by the contractor.
- e) For all hybrid inverter installations, 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 in close proximity to the existing electrical distribution panels of the building.
- f) Damage 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.

5.3 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.

5.4 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.

5.5 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.

5.6 After-Sales Service

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

5.7 Commissioning

Commissioning refers to inspection and testing of 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.

QUALIFICATION INFORMATION FORM

1. For individual bidders or individual members of a joint venture

1.1 Legal status of Bidder (*attach copy*).

Place of registration:

Principal kind of business:

Power of attorney for signing the Bid (attach).

1.2 Total Income from supplies/ services delivered in the last three (3) years:

 in 2017.
 in 2018.
 in 2019.

1.3 Supplies of a similar nature executed by the Supplier during the last two years (*not less than three (3) supplies*)

Name of Goods	Name of Clients, address and telephone	Contract Price

1.4 Copies of financial reports for the last three years (balance sheets, loss and profit statements, auditors' reports, etc.).List below and attach copies.

^{1.5} Evidence of compliance with NIS, GRA and VAT Registration for Vatable item/s (Only applicable to local bidders) (*attach supporting documents*).

1.6 Information on all claims, arbitration or other legal proceedings currently being examined or already settled.

Other party(ies) of trial Cause of dispute Amounts disputed

7. The Bidder must outline the Qualifications and Experiences of staffs that would be part of this Installation contract with relevant Curriculum Vitae's attached.

8. The Bidder certifies that he meets all the qualification criteria and requirements, in accordance with normative legal documents.

I certify the authenticity of all the above information.

(Full name)		(Title)		Signature and seal)
Dated on «	_»day of		_2020	. (date)

SUPPLIER'S BID

Date: _	
IFB No:	

TO: _____

(Name and address of Procuring Entity)

Dear Sir / Madam,

Having examined the bidding documents, including the Annexes and Addenda No

[specify number], the receipt of which is hereby acknowledged, we, the undersigned, offer to supply and Supply, Installation & Commissioning of a 10kWp at Organization of American States (OAS), The Ministry of Agriculture Building, Lot No. 18 Brickdam, Stabroek & a 20kWp Grid- Connected Solar Photovoltaic System at Inter-American Institute for Cooperation on Agriculture (IICA), The Ministry of Agriculture Building, Lot No. 18 Brickdam, Stabroek and a 10kWp Grid-Connected Solar Photovoltaic System with 12 kWh Battery Energy Storage System and a 5kW Hybrid Inverter at the Guyana Power and Light Inc., 257-259 Middle Street, South Cummingsburg, Georgetown in accordance with the requirements of the bidding documents to the total sum of

_____ [Total Amount of Bid

in Words and Figures], confirmed by the attached Price Schedule which is a part of this Bid.

 (a) We, including all subcontractors, regarding any part of the Contract, in accordance with the bidding documents, have no conflict of interests pursuant to subclause 2 (i) of the Instructions to Bidders;

b. We, including all subcontractors, regarding any part of the Contract, in accordance with the bidding documents, have not been declared by the [authorized State body] [National Board] on procurement to be ineligible, or are not ineligible, in accordance with the legislation of Guyana.

We undertake, if our Bid is accepted, to supply the Goods, in accordance with a delivery schedule given in the Schedule of Requirements.

If our Bid is accepted, we undertake to furnish the Performance security in the form of _______ to the amount of ______, comprising ______% of the Contract Price in order to execute the Contract properly and within the time period(s) specified in the Bidding Documents.

We hereby confirm that this bid shall be valid during ______ days starting from the date established for bid opening, and it shall be binding until the expiry of the indicated period.

Prior to the preparation and execution of a formal Contract, this Bid together with your written confirmation of its acceptance shall form a binding Contract on the parties.

We understand that you are not bound to accept the lowest or any bid you receive.

Dated the _____ day of _____ 20___.

Duly authorized to sign the Bid for and on behalf of

(name of Supplier)

(Full name)

(Title)

(Signature and seal)

Price Schedule

(To be made up by the Purchaser for any change against decrease or increase of items of works)

N.B 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. The choice of INCOTERMS shall be on the basis of CIF Georgetown for goods delivered form abroad

Lot #	Item No.	Brief description of Goods	Quantity	Unit Price	Total Price	Total Cos Including Delivery
1	1	PV module				
	2	PV Mounting Structure				
	3					
	4	Grid Connected Inverter				
	4	 PV Load Sharing Module (optional) 	r 2			
	5	Cabling and miscellaneous - PV system				
	6	Web based monitoring system	5			
	7	• 42" Smart TV				
	8	Installation and Commissioning				

Lot #	Item No.	Brief description of Goods	Quantity	Unit Price	Total Price	Cost
2	1	PV module				
	2	PV Mounting Structure				
	3	Grid Connected Inverter				
	4	PV Load Sharing Module (optional)				
	5	Cabling and miscellaneous - PV system				
	6	Web based monitoring system	,			
	7	• 42" Smart TV				
	8	Installation and Commissioning				

Lot #	Item No.	Brief description of Goods	Quantity	Unit Price	Total Price	Total Including Delivery	Cost
3	1	PV module					
	2	PV Mounting Structure					
	3	Grid Connected Inverter	l				
	4	Hybrid Inverter					
	5	Batteries					
	6	Cabling and miscellaneous - PV system					
	7	Cabling and miscellaneous - Hybrid Battery system					
	8	Web based monitoring system	5				
	9	• 42" Smart TV					
	10	Installation and Commissioning					

Supply Contract for Goods

THIS CONTRACT made the _____ day of _____ 20_ between

[Guyana Power and Light] (hereinafter referred to as "the Procuring Entity"), on the one hand, and *[name of Supplier]* from *[city and country of Supplier]* (hereinafter referred to as "the Supplier"), on the other hand have come to an Agreement on the following:

The Procuring Entity has announced bid for procurement of goods and services, namely

Supply, Installation & Commissioning of a 10kWp Grid Connected Solar Photovoltaic System at Organization of American States (OAS), Ministry of Agriculture Building, Lot No. 18 Brickdam, Stabroek, Supply, Installation & Commissioning of a 20kWp at Inter-American Institute for Cooperation on Agriculture (IICA), Ministry of Agriculture Building, Lot No. 18 Brickdam, Stabroek and Supply, Installation and Commissioning of a 10kWp Grid Connected Solar Photovoltaic System with 12kWh Battery Energy Storage System with a 5kW Hybrid Inverter, Guyana Power and Light Inc. 257-259 Middle Street, South Cummingsburg, Georgetown and has accepted the Supplier's bid for the supply of indicated goods and services to the sum of

[Contract Price in words and figures] (hereinafter referred to as "the Contract Price").

THIS CONTRACT WITNESSES AS FOLLOWS:

1. In this Contract, the terms and expressions have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall form the Contract and shall be deemed its integral part, viz.: () Procuring Entity's Notification of Award;

- b. Bid and Price Schedule submitted by Bidder;
- c. Schedule of Requirements;
- d. Technical Specifications;
- e. General Conditions of Contract;
- f. Special Conditions of Contract;
- g. Other documents included in the Contract documents;

3. This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

4. In consideration of the payments to be made by the Procuring Entity to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Procuring Entity to

provide the Goods and Services, and remedy defects therein in conformity in all respects with the provisions of the Contract.

5. The Procuring Entity hereby agrees to pay the Supplier in consideration of the delivery of the Goods and Services 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 of the foresaid, the parties hereto have caused this Contract to be executed in accordance with the legislation of Guyana the day and year first above written in the beginning of the document.

Signed and Sealed _____ [Full name and title of Procuring Entity's representative] Signed and Sealed _____ [Full name and title of Supplier's representative]

Annex 1

BID SECURITY (Bank Guarantee)

Whereas ______ [name of Bidder] (hereinafter referred as "the Bidder") is ready to submit his bid dated _____ [date of bid submission] for the supply ______ [name and/or description of goods] (hereinafter referred as "the Bid"),

KNOW ALL PEOPLE, that WE _____ [name of Bank] from _____ [name of country], having our registered office at the address

[address of Bank], (hereinafter referred as "the Bank"), are bound to

[name of Procuring Entity] to the sum of ______, by which payment to the indicated Procuring Entity shall be made in whole and in a timely manner; the Bank is bound on behalf of its name, its successors and authorized persons. This is to confirm that the license issued to the Bank shall provide for activity on issuance of the guarantee, and the person(s) signing that guarantee is entitled to act on behalf of the Bank, and if the approval of Board of Directors, or of General Stockholders Meeting is required, it is already received and there is no other approval required.

THE CONDITIONS of this obligation are as follows:

- 1. If the Bidder:
 - () Withdraws his Bid during the period of bid validity specified by the Bidder on the Form of Bid; or
- 2. If the Bidder having received notice from the Procuring Entity that his bid is accepted within the period of bid's validity:

() fails or rejects to sign the Contract at the request of; or

b. fails or rejects to furnish the performance security in accordance with the Instructions to Bidders;

We undertake to pay the Procuring Entity the above sum upon receipt of his first written request, without needing the Procuring Entity to show grounds or reasons of that request, provided that the sum requested by the Procuring Entity is due to him because of the occurrence of one or two or both conditions, specifying the condition or conditions occurred.

This guarantee shall remain in force during _____ days inclusive following the expiry of the bid validity period, and any request in respect thereof should reach the Bank not later than the abovementioned date.

(Full name of Bank's representative)	
--------------------------------------	--

(Title)

(Signature and seal)

Dated on «____» day of _____200__.

Address of the Bank issuing guarantee: _____

Bid-Securing Declaration

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

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

To: _____[insert complete name of Procuring Entity]

We, the undersigned, declare that:

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

2. We accept that we will automatically be suspended from being eligible for bidding in any contract with the Purchaser 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 by us in the Bidding Data Sheet; or

b. having been notified of the acceptance of our Bid by the Purchaser 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.

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

4. We understand that if we are a Joint Venture, the Bid Securing Declaration must be in the name of the Joint Venture that submits the bid. If the Joint Venture has not been legally constituted at the time of bidding, the Bid Securing Declaration shall be in the names of all future partners as named in the letter of intent.

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]

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(<i>day/ month/ year</i>):
IFB No:[insert number of bidding process]
Alternative No.:[insert identification No if this is a Bid for alternative]

To: _____ [insert complete name of Purchaser]

WHEREAS

We			[insert	complete n	name of .	Manufactu	ırer],	who are
official	manufacturers	of		_	_[insert	type	of	goods
manufactu	red], having facto	ories at						

	[insert	full	address	of	Manufacturer's
factories], do hereby authorize			[insert	complete name
of Bidder] to submit a bid the purpose of which is	to provid	e the	following	Good	ls, manufactured
by us	_[insert n	ame	and or br	ief de	escription of the
Goods], and to subsequently negotiate and sign the	e Contract	t.			

We hereby extend our full guarantee and warranty in accordance with Clause 1.3 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

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

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

Title:	[insert title]
--------	----------------

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

Dated on ______ day of ______, ____[insert date of signing]

Annex 4

PERFORMANCE SECURITY (Bank Guarantee)

WHEREAS			[i	name	e of the S	upplie	r] (hereinafte	r called	"the	Suppli	er")
has undertaken,	in a	accordance	with	the	Contract	No.				[Cont	ract
number] dated					_	20	_	to		suj	oply
			[a	lescr	iption of (Goods	and Services	(herein	after o	called	"the

Contract"),

AND WHEREAS it has been stipulated by you in the said Contract that the Supplier shall furnish you with a Bank Guarantee by a reputable bank to the sum specified therein as a security for compliance with the Supplier's obligations under the Contract,

AND WHEREAS we have agreed to furnish the Supplier with a security,

THEREFORE WE hereby confirm that we are the Guarantors and are responsible to you on behalf of the Supplier, up to a total of ________(amount of security in words and figures) and, we undertake to pay you, on your first request notifying of the Contractor's default with the Contract, and without cavil or argument, any sum or sums within the above limits, as aforesaid, without your needing to show grounds or reasons of your request or the sum specified therein.

Any modification or addition, or amendment in the terms of Contract which may be made by the Procuring Entity and the Supplier by Additional Agreement shall in no way release us from obligations under the Guarantee, and we waive any notice of modification, addition, or amendment. This guarantee shall be valid until full completion of the Contract Conditions by the Supplier. Also, we confirm that the license issued to the Bank shall provide for activity on issuance of a bank guarantee, and the person signing the guarantee is entitled to act on behalf of the Bank, and if the approval of Board of Directors or of General Stockholders Meeting is required, it is already received, and there is no other approval required

This guarantee shall be valid ti	ll theday of	20
(Full name of Bank's representative)	(Title)	(signature and seal)
Dated on day of	201	
Address of the Bank issuing gu	uarantee:	

Letter of Acceptance (Letterhead paper of Procuring Entity)

	(da	te)
To:		
	(Name of Supplier)	
	(address of Supplier)	-
	y notify you that your bid dated the day of20, for the stallation and commissioning of	
goods	<i>(description of goods)</i> up to a total	
of		
	(amount in figures and words)	

as amended and modified in accordance with the Instructions to Bidders is hereby accepted by our agency.

Simultaneously, we send you the Form of Contract and request you, pursuant to Clause 20.1 of the Instructions to Bidders, during seven (7) days to sign and date the Form of Contract, and return it at our address. Jointly with the signed Contract, we request you to furnish the performance security, in accordance with ITB Clause 20.2.

You hereby entrusted to start supply of the Goods, in accordance with the terms and conditions of a Contract.

Name of agency_____

Full name and Title_____

Signature of Authorized Representative_____

Annex: the Contract

Annex 6

Power of Attorney (Applicable)

ТО:	[1	name of Procuring Entity]	
WHEREAS Supplier], wh description of g	no is the Supplier _	[na	name of me and/or
of Supplier's H	Representative] to submit ovementioned goods to be	[name a the Bid, and sign the Contract based on In e supplied by us, and ature for and on behalf of Supplier]	
Dated on « (date)	» day of		
Note:	and signed by a co	ney must be drafted on a letterhead paper of the properties of the supplier. The supplier of attorney in his Bid.	11

Evaluation and Qualification Criteria

For Supply, Installation & Commissioning of the following PV Systems:

Lot 1 - Supply, Installation & Commissioning of a 10kWp Grid-Connected Solar Photovoltaic System at Organization of American States (OAS), the Ministry of Agriculture Building, Lot No. 18 Brickdam, Stabroek, Georgetown

Lot 2 – Supply, Installation & Commissioning of a 20kWp Grid-Connected Solar Photovoltaic System at the Inter-American Institute for Cooperation on Agriculture (IICA), Ministry of Agriculture Building, Lot No. 18 Brickdam, Stabroek,Georgetown

Lot 3 – Supply, Installation & Commissioning of a 10kWp Grid-Connected Solar Photovoltaic System with 12 kWh Battery Energy Storage System and a 5kW Hybrid Inverter at the Guyana Power and Light Inc., 257-259 Middle Street, South Cummingsburg, Georgetown

Item Description	Pass/Fail
Completed and signed bid submission form/form of tender/supplier's bid page(s).	
Submission of a valid business registration or certificate of incorporation 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.	
NIS compliance certificate in the name of the business as per business registration.	
GRA compliance certificate in the name of the business as per business registration. Document must be clearly legible.	
Submission of bid security in required amount	
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.	
Completed signed price schedule form must be submitted	
The Bidder shall provide accurate information on the Qualification Information form as provided about any litigation or arbitration resulting from contracts 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	
Litigation History: Non-performance of a contract did not occur as result of suppliers default since 1st January, 2018.	
Bidder must provide a letter stating all ongoing projects. The letter must be dated within one month of the bid opening date and include the name of the contract, year of commencement, name of client, value of contract, and completion percentage	
Experience and Technical Capacity:(a) The bidder shall furnish documentary evidence to demonstrate that it meets the following experience requirements:	
• Experience as a supplier and installer in carrying out five (5) or more solar PV systems of similar functional/technical characteristics and of a comparable scale over three (3) years.	
• The volume of supplies for not less than G\$2,000,000 over three (3) years including value of each supply.	
(b) The Bidder shall furnish documentary evidence to demonstrate the compliance of the Goods it offers with the technical specifications.	
(c) Evidence of Financial Capability of not less than 80% of the tendered sum in the form of a bank statement as at July 2018 and/or letter from a commercial bank showing overdraft facility as at July 2018 and Audited Financial Statements for the last two (2) years that is 2016 and 2017.	
(d) The bidder must demonstrate access to, or availability of, financial resources such as liquid assets to meet the overall cash flow requirements for this contract and its current commitments.	
Photovoltaic Modules	
 PV modules should be in accordance with international standards (IEC 61215, IEC 61730, IEC 61701, UL1703 etc.) and the National Electrical Code 2014 Article 690; 	
 300 watts or greater rated solar modules totaling 40 kWp or above PV Modules are according to International Standards 	
 All PV modules are of same capacity 	
• Is manufacturer 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 	
 MC4 connectors for an Modules 20 years warranty on Modules 	
Mounting Structure for PV Modules	

• Masta required to shring an activity	
Meets required technical specifications.	
Grid Connected Inverter	
• The minimum size of each Inverter shall be 5kW or above and	
totaling between 90% and 100% the solar array name plate capacity	
Master/Slave or String type	
• Grid Connection Voltage– Based on the utility connection at the	
site	
• AC Grid Frequency – 60 Hz	
• Operating Frequency range: Frequency Range \leq 58.4 to \geq 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); 	
• Automatic disconnect from the grid in case of need (see/check	
requirements of GPL);	
 Capability of connecting monitoring devices; 	
Ground fault monitoring / grid monitoring.	
• Safety measures (EN 61000, EN 60950and others).	
• Interface to the main grid (switchboard including manual	
disconnection device).	
Ten years' warranty	
Hybrid Inverter	
• The minimum size of each Inverter shall be 5kW or above and	
totaling between 20% and 25% greater than the total grid-connected	
inverter capacity.	
Master/ Slave or String Type	
• Efficiency: 96% and above	
• Integrated soft start/generator support;	
• Versatile - complete for off-grid management as well as grid-tie	
battery backup/AC Coupling;	
• Suitable for systems from 5 to 100 kW;	
• Grid Connection Voltage– Based on the utility connection at the site;	
• 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	

nomet controot	
power source;	
Compatible battery types Flooded, Gel, AGM	
• Indications of status of operation (e.g. LED);	
• Over voltage and under voltage protection;	
• Over-temperature protection;	
• Overload protection;	
Short circuit protection.	
Energy Storage System (Lithium Technology)	
• Supply and installation of a 12kWh or above	
• Batteries should be deep cycle type and recha	argeable;
 Lithium Ion/Iron technology; 	
Capable of 80% depth of Discharge	
• Design for renewable energy applications	specifically for hybrid
application;	
• Batteries are to be placed on racks to minimize	-
• Bidders are to supply the racks which m	
Bidders are to supply the racks which are to	•
metal and resistant to rust. Racks should be	
space required to store the batteries and	
ventilation. Welding, bolts and nuts use	
rust. Racks must be painted in two coats w	-
layer paint. The preferred color would be	
• Bidders are to supply drawings of the ra	acks with battery bank
configuration;	
• Minimum battery size is 300 Amp-Hour; (C10
• Sealed maintenance free;	
• Manufacturer's data sheets containing	
specifications must be provided. Batteries	
same make (manufacturer) having same ar	mpere-Hour and voltage
rating;	
• 6 years' warranty on batteries;	
• 2,000 and above cycles at 80% depth of disch	narge
• Standards to be conformed to:	
• UL 1989	
• IEC 61427:1999	
• UL 2054	1 6 1 4
6 1	have conformed to
environmental management standard	150 14001.
Cables	
• Meets required technical specifications.	
Monitoring System	
The installation shall provide real-time web-based e	lectric energy power
meter and appropriate current transformers to record	
motor and appropriate current dansformers to record	

 Screen Size – 42 Inches Cabinet Type – Slim Bezel Panel Type – LED Smart Internet Function – Yes HDMI Inputs – 2 USD inputs- 1 Wifi – Yes Warranty – 12 months Design Diagram Provide detailed schematic design layout of the proposed AC coupled installation including all connections to the generator and utility; 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 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 Earthing system requirements are met Monitoring system connection to existing network of facility. Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided Voltage / wattage/ current Model number Serial number 	 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); Historic Data; Data export via push or pull with an open data API. Smart TV Information/data being generated by the monitoring system must be displayed on the Smart TV on each of the premises via HDMI or internet. Smart TV should meet the following requirements:	
 Cabinet Type – Slim Bezel Panel Type – LED Smart Internet Function – Yes HDMI Inputs – 2 USD inputs- 1 Wifi – Yes Warranty – 12 months Design Diagram Provide detailed schematic design layout of the proposed AC coupled installation including all connections to the generator and utility; 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 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 Earthing system connection to existing network of facility. Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided Voltage / wattage/ current Model number 	• Screen Size – 42 Inches	
 Panel Type – LED Smart Internet Function – Yes HDMI Inputs – 2 USD inputs- 1 Wifi – Yes Warranty – 12 months Design Diagram Provide detailed schematic design layout of the proposed AC coupled installation including all connections to the generator and utility; 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 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 Earthing system connection to existing network of facility. Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided Voltage / wattage/ current Model number 		
 Smart Internet Function – Yes HDMI Inputs – 2 USD inputs- 1 Wifi – Yes Warranty – 12 months Design Diagram Provide detailed schematic design layout of the proposed AC coupled installation including all connections to the generator and utility; 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 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 Earthing system connection to existing network of facility. Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided Voltage / wattage/ current Model number 		
 HDMI Inputs - 2 USD inputs- 1 Wifi - Yes Warranty - 12 months Design Diagram Provide detailed schematic design layout of the proposed AC coupled installation including all connections to the generator and utility; 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 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 Earthing system connection to existing network of facility. Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided Voltage / wattage/ current Model number 		
 USD inputs- 1 Wifi – Yes Warranty – 12 months Design Diagram Provide detailed schematic design layout of the proposed AC coupled installation including all connections to the generator and utility; 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 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 Earthing system requirements are met Monitoring system connection to existing network of facility. Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided Voltage / wattage/ current Model number 		
 Wifi – Yes Warranty – 12 months Design Diagram Provide detailed schematic design layout of the proposed AC coupled installation including all connections to the generator and utility; 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 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 Earthing system requirements are met Monitoring system connection to existing network of facility. Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided Voltage / wattage/ current Model number 	-	
Design Diagram • Provide detailed schematic design layout of the proposed AC coupled installation including all connections to the generator and utility; 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 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 • Earthing system requirements are met • Monitoring system connection to existing network of facility. • Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided • Voltage / wattage/ current • Model number		
Design Diagram • Provide detailed schematic design layout of the proposed AC coupled installation including all connections to the generator and utility; 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 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 • Earthing system requirements are met • Monitoring system connection to existing network of facility. • Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided • Voltage / wattage/ current • Model number	• Warranty – 12 months	
 Provide detailed schematic design layout of the proposed AC coupled installation including all connections to the generator and utility; 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 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 Earthing system requirements are met Monitoring system connection to existing network of facility. Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided Voltage / wattage/ current Model number 		
 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 Earthing system requirements are met Monitoring system connection to existing network of facility. Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided Voltage / wattage/ current Model number 	• Provide detailed schematic design layout of the proposed AC coupled installation including all connections to the generator and utility; explanatory notes for sizing of equipment and components that comprise the system, and energy production calculations.	
 requirements, which cover installation, protection, and grounding of solar PV systems. Grid interconnection requirements are met Earthing system requirements are met Monitoring system connection to existing network of facility. Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided Voltage / wattage/ current Model number 	Installation	
 Grid interconnection requirements are met Earthing system requirements are met Monitoring system connection to existing network of facility. Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided Voltage / wattage/ current Model number 	requirements, which cover installation, protection, and grounding of	
 Earthing system requirements are met Monitoring system connection to existing network of facility. Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided Voltage / wattage/ current Model number 		
 Monitoring system connection to existing network of facility. Hybrid inverter circuit breaker requirement met. Product Manual and Label for each equipment are provided Voltage / wattage/ current Model number 	-	
Product Manual and Label for each equipment are provided • Voltage / wattage/ current • Model number	• Monitoring system connection to existing network of facility.	
 Voltage / wattage/ current Model number 		
Model number		
Certification		
Manufacturer's brand		

Provide local after sales service of no less than 3 years	
Provide statement on availability of spare parts from purchaser's country	
Provide statement on complete system warranty offered. At least two (2) years warranty on complete system is required.	
Provide evidence of Manufacturer's Authorization	
 Warranty: Two types of warranty have to be offered by the Bidder: 1. Warranty on hardware failures on all products offered and used according to international established terms 2. 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 	
Provide an implementation schedule indicating important milestones such as equipment delivery to sites, commencement & completion of installation, testing and commissioning of systems.	

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 evaluated price.