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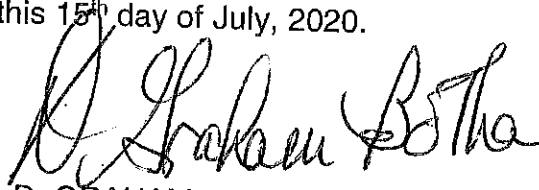
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OFFICE OF THE PUBLIC AUDITOR  
PROCUREMENT APPEALS

IN THE APPEAL OF	)	DOCKET NO. OPA-PA-19-010
GlidePath Marianas Operations, Inc.,	)	OPA-PA-20-001
Appellant.	)	<b>SUPPLEMENTAL PROCUREMENT</b>
_____	)	<b>RECORD</b>

COMES NOW, D. GRAHAM BOTHA, ESQ., and hereby submits the Supplemental Procurement Record in this matter on behalf of appellee, GUAM POWER AUTHORITY (GPA). This supplement consists of additional e-mails between John Cruz, Jennifer Sablan, and Mr. David Burlingame, GPA consultant, regarding GPA Phase III Solar, and additional attachments inadvertently not included in the supplemental procurement record filing on July 9, 2020. It specifically excludes all e-mail correspondence between Ms. Sablan and Mr. Burlingame related to other GPA studies, including Reliability Standards for GPA grid, Renewable Integration Study, Military Buildup, Phase II System Impact Studies, and Long Range Integration Study, which Mr. Burlingame testified about on July 7, 2020.

RESPECTFULLY SUBMITTED this 15<sup>th</sup> day of July, 2020.

  
D. GRAHAM BOTHA, ESQ.  
GPA General Counsel

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**From:** Jennifer G Sablan  
**Sent:** Wednesday, November 15, 2017 2:49 PM  
**To:** David Burlingame [dburlingame@epsinc.com]  
**Cc:** John J Cruz, Jr.; Francis J Iriarte; Andriano Balajadia (aeb.pe1881@gmail.com); Lance M.C. Lujan  
**Subject:** FW: Phase III Bid Update  
**Attachments:** Phase III Multi-Step Bid FINAL DRAFT (Vol I - Vol II).docx

Dave,

As mentioned the attached incorporated some of the changes you recommended. Most of the changes are highlighted and note "EPS Comment". There are some we may have to go over which are also noted.

jenn

**From:** Jennifer G Sablan  
**Sent:** Wednesday, November 15, 2017 7:43 AM  
**To:** 'Stiner, David D CIV NAVFAC PACI, PW' <david.stiner@navy.mil>  
**Cc:** 'Matthew.Harbeson@fe.navy.mil' <Matthew.Harbeson@fe.navy.mil>; 'Punu, Kirstin M CIV NAVFAC PAC, AM' <kirstin.punu@navy.mil>; Bawden, Thomas M CIV NAVFAC Pacific, PW (thomas.bawden@navy.mil) <thomas.bawden@navy.mil>; Lance M.C. Lujan <lmclujan@gpagwa.com>; John J Cruz, Jr. <jcruz@gpagwa.com>  
**Subject:** Phase III Bid Update

Dave,

Our procurement delayed announcement until tomorrow (11/16) as they process and prep documents.

Please note the following:

1. The bid documents that will be released does not have an updated map to reflect the S.Finn Sewer line and setback but we are preparing the amendments to avoid further delays in the bid announcement. Our amendment will draw out the setback and provide an update on revised property size (acres).
2. The contract term is 20 years with two 5 year extensions. This allows GPA some flexibility on contract if required and to potentially lower contract price.
3. There were some changes added as per EPS (Dave Burlingame & team). We may add additional changes to assist with future micro grid operations. Attached was the last edits that show the changes as recommended by EPS. Please note that the schedules provided in this draft may have change as they are finalized by procurement near announcement.
4. Site visit schedules. I believe Lance was trying to reach out to you and Matt regarding the site visits. We initially discussed Dec 12 or so but we may get requests to move this out since it short of 1 month notice (from bid announcement). Please advise on possibility of moving this to following week ~ Dec 20? We may need to discuss as it is close to holidays. The alternative is after the holidays sometime in January, but we would need to extend the schedule.

Regards,  
Jenn

Jennifer G. Sablan  
Manager, SPORD  
GUAM POWER AUTHORITY

**INVITATION FOR MULTI-STEP BID**

**NO.: GPA-XXX-17**

**RENEWABLE ENERGY RESOURCE**

**PHASE III**



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**JENNIFER G. SABLAN, P.E.**  
MANAGER OF SPORD

---

**JOHN J. CRUZ JR., P.E.**  
ASSISTANT GENERAL MANAGER OF  
ENGINEERING & TECHNICAL SERVICES

---

**JOHN M. BENAVENTE, P.E.**  
GENERAL MANAGER

GUAM POWER AUTHORITY  
P.O. BOX 2977  
HAGATNA, GUAM 96932

**INVITATION FOR MULTI-STEP BID**

**NO.: GPA-XXX-17**

**RENEWABLE ENERGY RESOURCE**

**PHASE III**



**Volume I**

**Commercial Terms & Conditions**

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## 1. Introduction

The Guam Power Authority (GPA) is inviting Renewable Resource Developers to participate in a Multi-Step Bid to provide renewable energy to serve the GPA power system. This Invitation for Multi-Step Bid (IFB) is an effort to comply with Public Law 29-62, which requires GPA to establish renewable portfolio standard goals and add additional renewable capacity with each construction of a conventional base load unit. GPA and United States Navy (Navy) have partnered in developing renewable energy resources that will aid both parties to achieve renewable goals. Navy has offered to lease properties to GPA to develop lands for installation of solar photovoltaic farms or facilities. The sites include one site in Northern Guam (South Finegayan) and four sites at Naval Base Guam.

This IFB is Phase III of GPA's effort to procure renewable energy resources. The Phase I solicitation resulted in two PPAs under NRG Energy, LLC for a combined output of 26MW using solar PV. The NRG facility is located in Dandan and was commissioned in October 2015. GPA is presently finalizing award for the Phase II solicitation.

In this Phase III acquisition, GPA intends to acquire up to 40 MW (AC) of renewable capacity with Energy Storage System. Proposed projects must meet the following established requirements:

- The Bidder's resource technology SHALL be a utility scale Solar Photovoltaic system with renewable integration energy storage system that will meet GPA's requirements as described in section 2.2.2 Acceptable ESS Technologies in "Volume II: Technical Qualification Proposal Requirements."
- The primary purpose of the ESS shall be for energy shifting which is to deliver the solar produced energy at another time or period of the day.
- The alternate function of the ESS shall be Renewable integration (RI-ESS). If and when required, i.e. GPA allows delivery directly to the grid, the RI-ESS must provide the following functions:
  - Significantly reduce the impact of intermittent ("non-firm") renewable energy generation power fluctuations on GPA's power system frequency and voltage at the point of interconnection
  - Achieve this by providing a supporting energy storage system to quickly respond to the variable renewable generation output and ameliorate the power imbalance within GPA's power grid or an assigned local micro grid.
  - Providing highly reliable fault recovery and optimizing power distribution
  - Provide a reactive capability requirement up to 0.95 lag to lead at the point of interconnection as required by GPA.
  - Demand Response Controls.
- The renewable resource will be available for commercial operation within 36 months from the contract execution.
- The technology proposed for the renewable resource will have at least 1 year of commercial operations history in a utility environment.
- The renewable resource will deliver energy directly to the existing GPA 34.5 KV transmission system.
- The renewable resource will provide energy for a term of 20 years with the option to extend two (2) additional five-year terms.
- The Bidder's renewable resource project will have a maximum export capacity of 30 MW (AC); this may be the combination of several systems at one site.

- The renewable resources shall be installed on predetermined sites GPA has leased from the U.S. Department of Navy on Guam military sites and would require successful bidders to enter into a sublease agreement with GPA subject to approval by the U.S. Department of Navy.
- The renewable resources shall conform to the Buy American Act for projects located on federal lands.
- Bidders will be required to obtain security access to sites as required by the Federal Government which may include local Rapid Gate or current required security access processing and fees.

The GPA webpage, <http://guampowerauthority.com/special/renew1.php>, also has the following information for your use:

- Public Law 29-62 (An act to promote the development of renewable energy)
- Public Law 30-66 (An act relative to permitting GPA and GWA to enter into long term contracts)
- Solar Energy Data from the Talofofu substation of the Dandan 25.65 MW solar photovoltaic farm

This bid shall be a Two Step process. Step One will establish a Qualified Bidders List (QBL) based on acceptable submitted non-price Bid information (or Technical Qualification Proposals). Step Two will evaluate the Priced Proposals from the vendors identified on the QBL and which, if any, Qualified Bidder(s) will be awarded a contract(s). Step One is the period from IFB announcement through Notification of Qualified Bidders. Step Two is the period after completion of the Technical Proposal Evaluation and notification of the QBL to the contract award date.

GPA will qualify the Bidders based on their Technical Qualification Proposals and the Qualitative Scoring Workbook. GPA will notify the Bidders selected for the QBL and will proceed with the second step of the bid process to open the sealed bid Priced Proposals of the qualified bidders. GPA will perform a comprehensive evaluation of each bid and select the Bidder(s) with the best bids based on the submitted purchase power price, minimum guarantees, and required technical data. After the selection of the winning Bidders(s), GPA will conduct system integration studies, at the selected Bidders' expense, to determine system upgrades or improvements required and the associated cost necessary for the selected renewable resource's integration into the GPA transmission system. If the selected Bidder(s) cannot proceed with the contract, GPA may elect to 1) go to the next best Bidder or 2) cancel the bid.

Table 1 indicates the anticipated milestones for the Bid process. GPA reserves the right to change the Bid process schedule at its sole discretion.

**Table 1: Bid Schedule**

Bid Process Milestones		From Date	To Date
Bid Announcement		11/14/17	
Vendors Submit Questions		11/14/17	1/04/18
Deadline for registration & payment of transportation fee		12/5/17	
Pre-Bid Conference & Site Visit (Meet at the GPA Main Office)		TBD	
Site Visit 1 – Naval Base Guam		TBD	
Site Visit 2 – South Finegayan Site on Route 3		TBD	
GPA Review and Answer Questions		11/14/17	1/10/18
Cut-Off Date for Receipt of Technical Proposals (Unpriced)		1/25/18	
EVALUATION Step One:	Technical Proposal Evaluation	1/29/18	2/15/18
	Notification of Qualified Bidders	2/16/18	
EVALUATION Step Two:	Cut-Off Date for Receipt of Priced Proposals	3/08/18	
	Opening of Priced Proposals (Public Opening)	3/08/18	
	Evaluation of Priced Proposals	3/08/18	3/22/18
	Notification of Successful Bidder(s)	3/23/18	
System Impact Study		TBD	TBD
Contract Negotiation		TBD	TBD
Contract Approval & Recommendation to Award (GPA Mgmt & CCU)		TBD	
Public Utilities Commission Review		TBD	
Contract Signing		TBD	

**1.1. Invitation for Bid (IFB) Document Organization**

Invitation for Bid documents are organized into five separate volumes, as follows:

- Volume I: Commercial Terms and Conditions
- Volume II: Technical Qualification Requirements
- Volume III: Draft Renewable Energy Purchase Agreement
- Volume IV: Bid Scoring Mechanism
- Volume V: Appendices

In addition, the IFB documents include two sets of electronic spreadsheets (Microsoft Excel Workbooks):

- Qualitative Scoring Workbook.xls
- Priced Proposal Workbook.xls

GPA reminds Bidders to submit the Priced Proposal in a separate sealed envelope clearly marked "Priced Proposal" for Step Two of the bid process.

**1.2. GPA Overview**

GPA is a public utility corporation that provides electric power service throughout the entire island of Guam. GPA, in conjunction with Private Partners, operates and maintains 9 power plants, with a total rated capacity of 428.8 MW. The Authority also has installed and maintains an estimated combined total of 182 miles of 115 kV and 34.5 kV transmission lines and an estimated 585 miles of primary distribution lines, and 30 substations. In addition, the authority owns, operates and maintains a total capacity of 18 MW for emergency generators to support 128 Guam Waterworks Authority water and sewage pump stations and sewage treatment facilities situated at various locations throughout Guam and 10 portable units.

**1.2.1. Generation Overview**

An overview of GPA's generation resources and transmission systems is provided in GPA's Integrated Resource Plan, which can be found at the following webpage:  
[http://guampowerauthority.com/gpa\\_authority/strategicplanning/2012IRP.php](http://guampowerauthority.com/gpa_authority/strategicplanning/2012IRP.php)

**1.2.2. Electrical System Overview**

Guam Power Authority has approximately 182 miles of 115KV and 34.5KV transmission lines. There are 6 ea 115KV and 35 ea 34.5KV lines connecting 30 substations throughout the island. These Substations have 63 ea 13.8KV distribution feeders with approximately 592 miles of lines. The Guam Power Authority follows National Electrical Manufacturers Association (NEMA) ANSI C84 for delivery of power and imbalance.

The GPA Islandwide System Transmission Single Line Diagram can be found on the following webpage:  
[http://guampowerauthority.com/gpa\\_authority/engineering/gpa\\_engineering\\_system\\_diagrams.php](http://guampowerauthority.com/gpa_authority/engineering/gpa_engineering_system_diagrams.php)

**1.2.3. Guam Weather**

Guam's climate is pleasantly warm year-round. The mean annual temperature is 81 degrees; generally, the range is from the low 70s to the middle 80s. The coolest and least humid months, marked by prevailing westerly tradewinds, are in December through February. Although the warmest months are from March through August, the refreshing trade winds blow steadily. The annual rainfall totals 80 to 110 inches. There are two seasons, the dry and the rainy. The dry season begins in December through June. The rainy season falls within the remaining months.

Weather	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg Fahrenheit	76	77	78	79	79	80	80	80	79	80	80	79
Avg Centigrade	24	25	26	26	26	27	27	27	26	27	27	26
rainfall inches	5.16	4.26	2.97	4.03	4.49	5.19	9.59	12.16	14.08	14.40	8.51	5.85
rel humidity %	77	76	75	74	73	76	76	81	81	80	80	78
sunshine hrs/day	11.15	11.30	11.51	12.16	12.40	12.58	13.00	12.47	12.24	12.00	11.35	11.18

**1.2.4. Historical Renewable Data**

Historical 1 second recorded at the Talofoto Substation of renewable energy delivered from NRG's 26MW Solar PV facility is available on the GPA renewable website for download at:  
<http://guampowerauthority.com/special/renew1.php>

Data is from March 2016 thru March 2017 and is the total output of the solar facility delivered to GPA.

**1.3. IFB Document Media**

The five-volume set of IFB documents and all Amendments to this IFB may be made available to Bidders in electronic format including:

- CD-ROM (inclusive of electronic spreadsheets);
- Downloadable files posted on the Internet (webpage or FTP site); or
- Transmittal through email.

## 2. Instructions to Bidders

These instructions to bidders are intended to provide guidance in the preparation of bids and do not constitute part of the bid or of the contract document.

This is a multi-step bid procurement consisting of two steps. Bidders must submit both parts of their bids: the Technical Qualification Proposal and the Priced Proposal by the Bid Submittal Closing Date indicated in Table 1: Bid Schedule. During Step One, only the submitted Technical Qualification Proposals will be evaluated. GPA will select a short-list of qualified bidders who will be eligible to submit their priced proposals.

In Step Two, the Priced Proposals based upon Technical Qualification Proposals will be considered for award. Only the Technical Qualification Proposals that are deemed acceptable, either initially or as a result of further discussions with prospective Bidders, will be considered for award during Step 2.

### 2.1. Correspondence

#### 2.1.1. Language

English is the official language of Guam. As such, Bidders should submit all of their bid documents, and any accompanying documents, in English. Any bids not submitted in English will be designated as "Unacceptable" and will not qualify for the QBL.

#### 2.1.2. Commercial and Technical Correspondence

Any prospective Bidder desiring an explanation or interpretation of the IFB, commercial terms, Technical Specifications, etc., must make a request in writing to the GPA Procurement Office at the mailing address or the email address listed below, referencing the Invitation for Multi-Step Bid No. GPA-XXX-17.

ATTENTION: JOHN M. BENAVENTE  
GENERAL MANAGER  
GUAM POWER AUTHORITY  
POST OFFICE BOX 2977  
HAGATNA, GUAM 96932-2977  
ATTENTION: SUPPLY MANAGEMENT ADMINISTRATOR  
  
PHONE: (671) 646-3054/55  
FAX: (671) 648-3165

In addition, Bidders may also make this request by writing to the GPA PMC Procurement Officer at: [jpangelinan@gpagwa.com](mailto:jpangelinan@gpagwa.com)

All inquiries must be received by GPA Procurement no later than the Cut-Off Date for Receipt of Proposals indicated in Table 1: Bid Schedule. Any oral explanations or instructions given by GPA to prospective Bidders will not be binding. GPA will promptly furnish any information given to a prospective Bidder concerning this IFB to all parties recorded by the Procurement Officer as having received the IFB. This information may be provided as an amendment to the IFB if that information is necessary in submitting bids or if the lack of it would be prejudicial to other prospective Bidders.

**2.2. Examination of Technical and Functional Requirements and IFB Documents**

Before submitting their bid, Bidders must familiarize themselves with the nature and extent of the work, duly noting any local conditions that may affect the work to be done and the labor, materials, and equipment required.

Bidders are also required to carefully examine all IFB documents inclusive of all technical and functional requirements and to inform themselves of all conditions and requirements for the execution of the proposed work in accordance with the laws and regulations of the Territory of Guam. Ignorance on the part of Bidders of any part of the IFB documents and Technical Requirements will in no way relieve them of the obligations and responsibilities assumed under the contract.

**2.3. IFB Amendment**

Any amendment, modification or addendum issued by the Guam Power Authority, prior to the opening of the bids, for the purpose of changing the intent of the Technical Requirements, clarifying the meaning or changing any of the provisions of this IFB, shall be binding to the same extent as if written in the originally-issued IFB documents.

Any addendum issued will be made available to all Bidders via mail, fax, e-mail or posting to the GPA Website or FTP site. The Bidders shall acknowledge receipt of the amendment by a signature on one copy, which is to be returned to GPA at the mailing address, email address, or FAX number listed under Section 2.1.2: Commercial and Technical Correspondence.

**2.4. Familiarity with Laws**

Bidders shall be familiar with all U.S. Federal and local laws, ordinances, rules and regulations of Guam that in any manner affect the work. Ignorance of law on the part of the Bidders will not relieve the Bidder from responsibility.

**2.5. Cost of Bidding**

Bidders shall bear all costs associated with the preparation and submission of their bids. GPA will not be responsible or liable for those costs, regardless of the outcome of the IFB process.

**2.6. Priced Proposals Furnished Separately without Technical Qualification Proposals**

Bidders are required to submit their Priced Proposals as found in the MS EXCEL Workbook, **Priced Proposal Workbook.xls** separately from their Technical Qualification Proposals and completed **Qualitative Scoring Workbook.xls** by the Cut-Off Date for Receipt of Priced Proposals. Bidders must package Priced Proposals in a separate sealed envelope marked "Priced Proposal" and indicating the date and time of bid package submittal.

As part of the data requirements for Priced Proposals, Bidders must furnish a price for energy delivered for each year of the contract. These pricing requirements are described in more detail in Volume II: Technical Requirements

**2.7. Price/Cost Data**

Bidders shall provide prices/costs in U.S. Dollars

## **2.8. Documents Executed Outside Guam**

The Power of Attorney, performance bond guarantee, and documents defining the constitution of the joint venture, consortium, company or firm, if executed outside Guam, whether required to be submitted with the bids or after the award of the contract, must be authenticated by a Notary Public or other official authorized to witness sworn statements.

## **2.9. Step One Procedures**

The following outlines the requirements for technical (non-price) bid submittals.

### **2.9.1. Submission of Bids**

#### **2.9.1.1. Bid Contents**

Each bid shall contain a complete and clear description of the proposed Solar PV project with energy storage, construction timelines and permitting experience, anticipated location, proposed interconnection with GPA system, operation and maintenance experience with proposed technology (as more fully discussed in Volume II: Technical Requirements). Each bid shall include the following:

- Cover and bid checklist forms defined in Appendix A;
- Responses and supporting information to the questions raised in the Qualitative Scoring Workbook;
- Completed electronic copy of the **Technical Bid Form Workbook**; and,
- Supplementary information described below.

Each bid shall be submitted in the format and quantities discussed in Section 2.9.2: Bid Submittal.

#### **2.9.1.2. Responses and Supporting Information to Qualitative Questions**

As part of their bid package, Bidders shall provide written responses and supporting information to answer each of the questions raised in the Qualitative Scoring Workbook on the tab marked Part 1- Qual Support References. The Bidders will then reference in the Qualitative Scoring Workbook, using the appropriate Section and/or page numbers, precisely where in their bid packages answers to each of the questions listed may be found.

#### **2.9.1.3. Electronic Copies of the Bid Scoring Workbook**

Bidders shall complete both the Qualitative Scoring Workbook and the Priced Proposal Workbook, and must submit electronic copies of these two Workbooks separately from each other in clearly marked envelopes. Electronic copies should be provided on USB device. Files shall not be additionally electronically secured. Any security changes may delay evaluation.

#### **2.9.1.4. Supplementary Information**

Bidders shall submit all the supplementary information required by the IFB documents. The supplementary information must be provided in sufficient detail and clarity to permit a complete comparison of the bids with the Technical Specifications. Volume II provides more detail on information



required for the Technical Qualification Proposals and Priced Proposals. The supplementary information included with each bid shall include the following:

1. Information requested in the Qualitative Scoring Workbook and in Volume II: Technical Qualification Requirements.

Submittal of the following supplementary information is mandatory and must be provided by the Bid Submittal Closing Date. GPA shall automatically disqualify any bid submitted without the supplementary information listed below:

2. A copy of the Bidder's Articles of Incorporation or other applicable forms concerning business organization (i.e. partnership, sole proprietorship, etc.) and By-Laws;
3. Affidavit of Disclosure of Major Shareholder (Appendix C);
4. Audited financial information for the last five years on Bidder's firm and all subcontractors that will be used in this contract. If they have one, Bidders must include their Dunn and Bradstreet Number or Other Major Credit Rating Agency rating, or comparable, independent verification of their credit standing.
5. Certificate of Good Standing to conduct business from the jurisdiction of their company's residence;
6. Non-collusion Affidavit (Appendix D);
7. Information regarding outstanding claims against the Bidder, if any;
8. Bid Bond (Appendix B);
9. A current Guam Business License is not required in order to provide a Bid for this engagement, but is a pre-condition for entering into a contract with the Authority. *NOTE: The successful bidder must furnish a current Guam Business License prior to contract execution;*
10. No Gratuities or Kickbacks Affidavit (Appendix J);
11. Ethical Standards Affidavit (Appendix K);
12. Declaration Re Compliance with U.S. DOL Wage Determination (Appendix L);
13. Restriction Against Sex Offenders Employed by Service Providers to Government of Guam from Working on Government of Guam Property (Appendix M);

## 2.9.2. Bid Submittal

### 2.9.2.1. Manual Options for Bid Submittal

Bidders may submit their bids via mail services (such as U.S. Postal Service, Federal Express or DHL) to the address provided in section 2.1.2. Bidders may also deliver bids at the GPA Procurement Office located at:

Guam Power Authority  
Gloria B. Nelson Public Service Building  
Procurement Office, Room No. 101  
688 Route 15, Mangilao, Guam 96913

#### 2.9.2.2. Non-repudiation Issues

GPA has structured its Manual IFB submittal procedures to ensure non-repudiation of the submitted bids. In this IFB, "non-repudiation" means strong and substantial evidence of the identity of the sender and owner of the bid and of bid's integrity in so far as it being unaltered from its original sent state, sufficient to prevent a party from successfully denying the origin, submission or delivery of the bid and the integrity of its contents. Non-repudiation applies to both parties to this IFB transaction. It binds the sender as well as precludes the recipient from denying the exchange of information and material upon the receipt of secure acknowledgement from the recipient.

GPA and the Bidder shall manage the Manual IFB Submittal Process to address non-repudiation, security and confidentiality inclusive but not limited to the following:

- Manually executed signatures and printed media documents;
- Chain of custody receipts;
- Manual time-stamps for receipt of IFB materials;
- Machine generated Fax confirmation reports;
- Secure notification e-mail;
- Electronic Postings on the guampowerauthority.com domain;
- Physical delivery of printed material bids;
- Physically secured area storage of IFB materials.

#### 2.9.2.3. Signature of Bidder

A duly authorized person must sign the Bidder's bids. All names shall be typed or printed below the signature. A bid submitted by a corporation must bear the seal of the corporation, be attested to by its Secretary, and be accompanied by necessary Power-of-Attorney documentation.

Associated companies or joint ventures shall jointly designate one Power-of-Attorney person authorized to obligate all the companies of the association or joint venture. A bid submitted by a joint venture must be accompanied by the document of formation of the joint venture, duly registered and authenticated by a Notary Public, in which is defined precisely the conditions under which it will function, its period of duration, the persons authorized to represent and obligate it, the participation of the several firms forming the joint venture, the principal member of the joint venture, and address for correspondence for the joint venture. Bidders are advised that the joint venture agreement must include a clause stating that the members of the joint venture are severally and jointly bound.

All required bid documents must be submitted and received by the Procurement Office by the Bid Submittal Closing deadline.

#### 2.9.2.4. Manual Bid Submittal Package Format and Handling

This section describes the bid package format and content required by GPA that is specific to manual submittal of bids. The Manual IFB Bid Submittal Process is characterized by a preponderance of the submitted material in tangible printed media form that is hand-delivered by an authorized agent of the Bidder to the Procurement Officer of the Guam Power Authority. Both the Bidders' agents and the GPA Procurement Officer are live human beings. In addition, both parties perform non-repudiation of the bid through the execution of manually executed signatures, seals and time stamps.

Bidders are required to submit one original and six (6) bound copies of their bid including one completed electronic copy on one disk of the Qualitative Scoring Workbook and one completed electronic copy on another disk of the Priced Proposal Workbook. The Bidders are advised to keep a copy of the completed Workbooks and test the electronic copies on disks prior to submitting them to GPA.

#### **2.9.2.5. Marking and Packaging of Bids**

As a general rule, the manually submitted Bids shall be packaged in separate sealed boxes with the following information clearly marked on the outside of the two largest sides:

- 1) "TECHNICAL QUALIFICATION PROPOSAL" OR "PRICED PROPOSAL"
- 2) "RENEWABLE RESOURCE ACQUISITION";
- 3) BIDDER'S NAME;
- 4) INVITATION FOR BID NUMBER;
- 5) CLOSING DATE and TIME (Guam Standard Time).
- 6) Addressed As follows:

ATTENTION:                    JOHN M. BENAVENTE  
                                      GENERAL MANAGER, INTERIM  
                                      GUAM POWER AUTHORITY  
                                      POST OFFICE BOX 2977  
                                      HAGATNA, GUAM 96932-2977

If the Bidder's submittal cannot fit within one box or if the Bidder chooses to submit more than one box, each box must be labeled as described above and with the following additional information:

- 7) Box Number Within the Set of Submitted Boxes
- 8) The Total Number of Boxes Submitted.

#### **2.9.2.6. Receipt and Handling of Manually Submitted Bids**

Upon receipt, each Bid submittal package will be time-stamped. The only acceptable evidence to establish the date and time of receipt at the GPA is the date/time stamp of the Guam Power Authority's procurement office on the wrapper or other documentary evidence of receipt maintained by GPA. Bids will be stored in a secure place until the date and time set for proposal opening.

GPA procurement personnel will stamp the outside of each package using the GPA Procurement time stamp and will officially log the date and time that each Bidder's sealed bid package is received.

#### **2.9.3. Submittal Closing Date**

The Technical Qualification Proposal Submittal Closing Date is (insert date & time) o'clock PM, Guam Standard Time. Submitted proposals, excluding the Priced Proposals, will be opened at this time which

will initiate the proposal evaluation process. No proposals shall be accepted after the Bid Submittal Closing Date and Time.

**2.9.4. Bid Changes During Bid Process**

Changes may be made to the Technical Qualification Proposals(s) prior to the Bid Submittal Closing Date.

**2.9.5. Evaluation of Technical Qualification Proposals**

After the Bid Submittal Closing Date, GPA will evaluate the Technical Qualification Proposals and develop the QBL.

GPA will use the score from the Qualitative Scoring Workbook to evaluate the contents of bids and categorize each of the bids using one of the following designations:

- a. Acceptable—the Bidder will qualify for the QBL and its Priced Proposal may be considered
- b. Potentially Acceptable—the Bidder's submittal has a reasonable possibility of being made acceptable; or
- c. Unacceptable—the Bidder's submittal does not meet the requirements and will not be considered further.

The Procurement Officer shall record in writing the basis for finding an offer unacceptable and make it part of the procurement file.

The Procurement Officer may initiate Step Two if there are sufficient acceptable Technical Qualification Proposals to assure effective price competition in the second step without technical discussions. If the Procurement Officer finds that such is not the case, the Procurement Officer shall issue an amendment to this IFB or engage in technical discussions with Bidders as set forth below.

The Procurement Officer may conduct discussions with any Bidder who submits an acceptable or potentially acceptable technical Offer. During the course of such discussions, the Procurement officer shall not disclose any information derived from the Technical Qualification Proposals to any other Bidder. Once discussions are begun, any Bidder, who has not been notified that its Technical Qualification Proposal has been finally found acceptable, may submit supplemental information amending its Technical Qualification Proposal at any time. Such submission may be made at the request of the Procurement Officer or upon the Bidder's own initiative.

**2.9.5.1. Notice of Unacceptable Bid**

A notice of unacceptability will be forwarded to the Bidder upon completion of the Technical Qualification Proposal evaluation and final determination of unacceptability. When the Procurement Officer determines a Bidder's Technical Qualification Proposal to be unacceptable, such Bidder shall not be afforded an additional opportunity to supplement its offer.

## **2.10. Step Two Procedures.**

Upon completion of Step One and the selection of qualified bidders, qualified bidders must submit their priced proposals. GPA will proceed with Step Two of the multi-step bid, which includes evaluation of the Priced Proposals and award of the contract(s).

### **2.10.1. Request for Priced Proposals and Performance Guarantees**

Each Bidder from the QBL will be notified and GPA will open their Priced Proposals, which were submitted on compact disk in the MS EXCEL workbook titled Priced Proposal Workbook.xls. GPA will select a winning Bidder based on a comprehensive evaluation of the Priced Proposals, guarantees, and the resulting net present value of utility cost integrating each bid's Priced Proposal and generation profile as described in Volume IV: Bid Scoring Mechanism.

#### **2.10.1.1. Bid Changes During Bid Process**

Changes may be made to the Priced Proposals only prior to the Bid Submittal Closing Date.

#### **2.10.1.2. Bid Validity**

All price/cost data submitted with the Bidders' bids shall remain firm and open for acceptance for a period of not less than eight (8) months after the Bid Submittal Closing Date; thereafter, the Priced Proposal shall be subject to renewal by mutual agreement between the Bidder and GPA. The Bidder shall state the actual date of expiration in their Priced Proposal with their bid submittal.

### **2.10.2. Preliminary Examination of Priced Proposal**

GPA will examine the Priced Proposal on the opening date to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Priced Proposals are generally in order.

Arithmetical errors will be rectified on the following basis. If there is discrepancy between the unit price and the total price, including any discounts, that is obtained by multiplying the unit priced and quantity, the unit price shall prevail and the total price shall be corrected. If the Bidder does not accept the correction of the error, its bid will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail.

### **2.10.3. Evaluation Criteria and Comparison of Priced Proposals**

GPA will only evaluate and compare the Priced Proposals for Bidder's whose Technical Qualification Proposals were determined to be responsive to the IFB document requirements during Step One. GPA's evaluation of Priced Proposals shall compare the \$ per MWh Priced Proposals (as they apply to the expected energy production levels and Annual Minimum Quantity described in the Volume II: Technical Requirement) to GPA's cost to produce the same energy from its existing non-renewable resources. This evaluation method is explained in more detail in Volume IV: Bid Scoring Mechanism.

## **2.11. General Bid Guidelines and Requirements**

**2.11.1. Amendments to the IFB Document**

GPA may elect to change the IFB documents in whole or in part. GPA shall send all Amendments to the IFB document recipients via fax and/or e-mail. In addition, GPA will make all Amendments available on the GPA Procurement Available Bids and RFPs website at [http://guampowerauthority.com/gpa\\_authority/procurement/gpa\\_current\\_rfps.php](http://guampowerauthority.com/gpa_authority/procurement/gpa_current_rfps.php)

**2.11.2. Proprietary Data**

For the purposes of this IFB and submitted bids, the laws, rules and regulations of Territory of Guam concerning confidentiality shall govern. Bidders may designate those portions of the Bid that contain trade secrets or other proprietary data that are to remain confidential.

The Procurement Officer shall examine the bids to determine the validity of any request for nondisclosure of trade secrets and other proprietary data identified in writing. If the Bidder and GPA do not agree as to the disclosure of data, the Procurement Officer shall inform the Bidder in writing and in e-mail within five working days of the closing date for Bid submittal what portions of the Bid will be disclosed and that, unless the Bidder protests under the Conditions of Contract Disputes clause the information will be so disclosed. The bid shall be opened to public inspection subject to any continuing prohibition of the disclosure of confidential data.

**2.11.3. Acceptance of Bids**

GPA reserves the right to reject any or all bids and to waive minor errors, informalities, and discrepancies made by the Bidders if it appears in GPA's best interest to do so.

Any effort by a Bidder to influence GPA in the bid evaluation, bid comparison or contract award decisions may result in the rejection of the bid. Once GPA has arrived at a decision regarding the award of the contract, it will notify promptly the winning Bidder in writing.

**2.11.4. IFB Cancellation or Delay**

The Guam Power Authority reserves the right to delay award or to cancel the IFB, or to reject all bids or any individual bid in whole or in part, at any time prior to the final award. When the IFB is canceled or rejected prior to final award, notice of cancellation or rejection shall be sent to all Bidders and all bid materials will be promptly returned. The reasons for cancellation or rejection shall be made a part of the procurement file that is available for public inspection. After the Bid Submittal Closing Date, but prior to award, all bids may be rejected in whole or in part when the Procurement Officer determines that such action is in the Territory's best interest for reasons including but not limited to:

- a) The supplies and services being provided are no longer required;
- b) The IFB did not provide consideration of other factors of significance to the Territory;
- c) All otherwise acceptable bids received have clearly unreasonable price/cost data;
- d) There is reason to believe that the bids may not have been independently arrived at in open competition, may have been collusive and may have been submitted in bad faith;

Again, any individual bid may be rejected in whole or in part when in the best interest of the Territory.

**2.11.5. Disqualification of Bidder**

When, for any reason, collusion or other anticompetitive practices are suspected among Bidders or offerors, a notice of the relevant facts shall be transmitted to the Guam Attorney General. Bidders suspected of collusion or other anticompetitive practices may be suspended or debarred from participating in future procurement opportunities for a specified period.

**2.11.6. False Statements In Bid**

Bidders must provide full, accurate, and complete information as required by this IFB and its attachments. The penalty for making false statements in any bid or bid is prescribed in 18 U.S.C. 1001 and Title 9, Guam Code Annotated. Note, by use of a digital signature to sign the bid, the Bidder agrees that this act legally binds the Bidder to his bid.

**2.12. Award of Contract**

The contract will be awarded to the Bidder evaluated as being qualified and with the best-priced bid.

The successful Bidder will be notified in writing (letter or e-mail or fax) of the intent to award the contract, and will be required to send to GPA's offices, within ten (10) days of the date of receipt of such notice, a representative or representatives with proper Power-of-Attorney for the purpose of executing a contract with such alterations or additions thereto as may be required to adopt such contract to the circumstances of the bid.

The successful Bidder shall provide the required Performance Bond within fourteen (14) days of receipt of the GPA Notice of Intent to Award.

Failure on the part of the successful Bidder to provide a Performance Bond and/or to enter into a contract with GPA shall be sufficient grounds for the annulment of the award. The negotiations may then be resumed with the next most qualified Bidder.

**2.13. Bid and Performance Bond Requirements**

**2.13.1. Bid Bond Form and Amount**

A bid bond for an amount of \$ 150,000 (USD) for each submitted proposal is required and may be in the following form:

- a. Cash, Bank Draft or Certified Check made payable to the Guam Power Authority;
- b. By wire transfer to Guam Power Authority, Account No. 601-026246, Routing No. 121405115, Bank of Guam, P. O. Box BW, Hagatna, Guam 96910
- c. Letter of Credit;
- d. Surety Bond – valid if accompanied by:
  - (1) Current Certificate of Authority to do business on Guam issued by the Department of Revenue and Taxation;
  - (2) Power of Attorney issued by the Surety to the Resident General Agent

- (3) Power of Attorney issued by two (2) major officers of the Surety to whoever is signing on their behalf.

Bid Bonds, submitted as Bid Guarantee, without signatures and supporting documents are invalid and associated bids will be rejected.

If a Bidder desires to submit a bid bond with an acceptable bonding company, the Bidder must submit original copies of Appendix B.

For those Bidders not selected for award of contract, bid bonds will be refunded. For those Bidders selected for award of contract, bid bonds will be refunded once GPA has received their performance bond (see next Section 2.13.2). Any Bidder who is selected for award of contract but who is unable to fulfill the obligations of its respective bid(s) will permanently forfeit its bond(s) to GPA.

#### **2.13.2. Performance Bond Form, Amount, and Duration**

A performance bond shall be required from winning Bidders in the form as prescribed in Appendix F. For the period during construction and prior to the Commercial Operation Date of the project, the selected Bidder(s) shall provide a Development Security Bond which shall be in effect upon contract execution and until the Commercial Operation Date of the project and submission of the Contract Performance Bond. The amount of the Development security bond shall be 50% of the total projected payment for the 1<sup>st</sup> contract year based on the contractor's 1<sup>st</sup> Contract Year energy rate and the guaranteed energy production and shall be posted as a Letter of Credit or Cash.

At the beginning of the contract term, after the Commercial Operation Date, and at the beginning of each GPA Fiscal Year during which the contract is in effect, the Bidder shall provide and maintain a Contract Performance Bond performance bond in the amount equal to Cost for Minimum Annual Energy as described in the Draft Renewable Energy Purchase Agreement for that full or partial fiscal year within the term of the contract.

Upon submission of the Contract Performance Bond, the Development Security Bond can be returned. The selected bidder(s) may forfeit a portion or all of its Development Security if the selected bidder(s) fails to meet requirements as described in the Draft Renewable Energy Purchase Agreement (see Volume III).

If the Bidder is declared by GPA to be in default under the CONTRACT, GPA may exercise any or all rights and remedies it possesses under the provisions of the performance bond.

The GPA Fiscal Year begins on October 1 and ends on September 30 of the following calendar year.

#### **2.13.3. Requirement for Performance Bond Execution by a Guam Licensed Surety Company**

The Bidder shall provide a Performance Bond executed by a surety company licensed to do business on Guam.



3. Site Visits

This bid will require site visits to be conducted over two consecutive days. Site Visit #1 will be for the four (4) sites located on Naval Base Guam in Agat. Site Visit #1 requires security screening for the site visit. Bidders will be also required to be transported via bus from the GPA Main Office in Mangilao to the Naval Base sites. Only bidders that have met the security clearance requirements from Navy and has a valid visitors pass will be allowed to board the bus for the site visit of these sites. Participants for the site visit are required and responsible to obtain security clearance. Note that there are restrictions to base visitor access. This includes restrictions on photography. Bidders must formally request for pictures or clarifications of the properties prior to the "Cut-Off Date for Receipt of Questions" deadline Section 1 Table 1; Bid Schedule of this document or as amended. GPA will be required to obtain these responses from Navy. Bidders must register and pay \$ TBD for Site Visit #1 by TBD 12/5/17 to determine and secure transportation requirements.

Site Visit #2 of the South Finegayan site located on Route 3 in Dededo does not require security screening or coordinated transportation to the site. Participants to this Site Visit will meet GPA at the site as specified on the Bid Schedule. Additional information on the site visits will be provided during the Pre-Bid Conference.

#### 4. Required Bid Forms

This Section describes the forms required for submission of the Bid.

The following forms in Appendices A, B, C, D, E, J, K, L and M and MS EXCEL Workbooks must be completed:

- a) Appendix A, Bid Checklists
- b) Appendix B, Bid Bond Form and Instructions Performance Bond
- c) Appendix C, Major Shareholders Disclosure Affidavit
- d) Appendix D, Non-collusion Affidavit
- e) Appendix E, Local Procurement Preference Application
- f) Appendix F, Performance Bond
- g) Appendix J, No Gratuities or Kickbacks Affidavit
- h) Appendix K, Ethical Standards Affidavit
- i) Appendix L, Declaration Re Compliance With U.S. DOL Wage Determination
- j) Appendix M, Restriction Against Sex Offenders Employed by Service Providers to Government of Guam from Working on Government of Guam Property
- k) Qualitative Scoring Workbook.xls
- l) Priced Proposal Workbook.xls

These Forms and Workbooks will be available in electronic format in the CD-ROM provided to Bidders and at the ftp site. Access information for the ftp site shall be provided upon registration and payment of the non-refundable fee.

In addition, Appendix Q, Site Access Security Application, is necessary to obtain required access for the Site #1 (Naval Base Guam) site visit. Each site visit participant is responsible to obtain necessary clearance prior to the scheduled Site #1 Visit. This process will not be handled by GPA.

#### 4.1. Technical Bid Forms

The following referenced forms are contained in Appendices A, C, D, E, J, K, L and M, and shall be completed and submitted with the Bid.

##### 4.1.1. Document Receipt Checklist

The Bidder shall complete Form A-1 by initialing the Invitation For Bid Documents received from Guam Power Authority, including the latest IFB Amendment received. This Form is an acknowledgement of receipt, review and understanding of the IFB documents.

**4.1.2. Bid Submittal Checklist**

The Bidder shall complete Form A-2. This Form provides an inventory of documents submitted by the Bidder in response to the Bid requirements.

**4.1.3. Major Shareholders Disclosure Affidavit**

Bidders shall fill out the Major Shareholders Disclosure Affidavit form in Appendix C and submit it with their bids.

**4.1.4. Non-collusion Affidavit**

Bidders shall fill out the Non-collusion Affidavit form in Appendix D and submit it with their bids.

**4.1.5. Local Procurement Preference Application**

Bidders shall fill out and sign the Local Procurement Preference Application in Appendix E and submit it with their bids.

**4.1.6. No Gratuities or Kickbacks Affidavit**

Bidders shall fill out and sign the No Gratuities or Kickbacks Affidavit in Appendix J and submit it with their bids.

**4.1.7. Ethical Standards Affidavit**

Bidders shall fill out and sign the Ethical Standards Affidavit in Appendix K and submit it with their bids.

**4.1.8. Declaration Re Compliance with U.S. DOL Wage Determination**

Bidders shall fill out and sign the Declaration Re Compliance with U.S. DOL Wage Determination in Appendix L and submit it with their bids.

**4.1.9. Restriction Against Sex Offenders Employed by Service Providers to Government of Guam from Working on Government of Guam Property**

Bidders shall fill out and sign the Restriction Against Sex Offenders Employed by Service Providers to Government of Guam from Working on Government of Guam Property Affidavit and submit it with their bids.

**4.1.10. Local Procurement Preference Application**

Bidders shall fill out and sign the Local Procurement Preference Application in Appendix E and submit it with their bids.

**4.2. Price Bid Form**

**4.2.1. Fee & Evaluation Data**

Bidders shall complete the Priced Proposal worksheet contained in the MS EXCEL Workbook Priced Proposal Workbook.xls and submit it in a sealed envelope which will only be opened when the Bidder has been deemed qualified through Step One of the multi-step bid process. This workbook outlines the Bidder's rate for energy delivered and the proposed plant's operating characteristics which will be used to determine total system costs.

**5. Conditions of Contract**

**5.1. Definitions**

Wherever used in these General Conditions or in the other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural thereof.

**5.1.1. Approved**

The word "Approved," when applied by ENGINEER to CONTRACTOR's drawings or documents, shall mean that the drawings or documents are satisfactory from the standpoint of interfacing with GPA-furnished components, and/or that ENGINEER has not observed any statement or feature that appears to deviate from the Specification requirements.

**5.1.2. Approved As Revised**

The words "Approved As Revised," when applied by ENGINEER to CONTRACTOR's drawings or documents shall mean that the drawings or documents are approved as defined above, except that the corrections shown are required for the proper interfacing with GPA-furnished components or are necessary to be in conformance with the Specification's requirements.

**5.1.3. Change Order**

A written instrument to CONTRACTOR signed by GPA authorizing an addition, deletion, or revision in the goods or special services, or an adjustment in the purchase order price or the delivery time, issued after the effective date of the Contract Agreement (Agreement).

**5.1.4. Seller**

The CONTRACTOR.

**5.1.5. Day**

A calendar day of twenty-four (24) hours measured from midnight to the next midnight

**5.1.6. Delivery Time**

The total number of days or the dates stated in the Agreement for furnishing the Goods and/or Special Services

**5.1.7. Defective**

An adjective which when modifying the words Goods or Special Services refers to Goods or Special Services which are unsatisfactory, faulty, deficient, do not conform to the Contract Documents, or do not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents.

**5.1.8. Drawings**

Drawings are all official drawings approved by the ENGINEER and showing the character and scope of the Goods to be furnished.

**5.1.9. Effective Date of the Contract Agreement**

The date indicated in the Purchase Agreement on which it becomes effective, or if no such date is indicated, the date by which the Purchase Contract is signed by both parties.

**5.1.10. ENGINEER**

Wherever the words "ENGINEER" or "ENGINEERS" appear in the CONTRACT Documents, it shall mean GPA's engineer duly appointed as "ENGINEER". GPA shall assign several ENGINEERS as required to cover specialized areas of expertise.

**5.1.11. ENGINEER's Instructions**

Written instructions issued by ENGINEER which clarify or interpret the CONTRACT Documents or order minor changes or alterations in the Goods or Special Services to be furnished but which do not involve a change in the Purchase Price or the Delivery Time.

**5.1.12. General Manager**

The General Manager is the Chief Executive Officer of the Guam Power Authority. The office and title of General Manager shall apply to any person acting in a regular or in an acting capacity as the Chief Executive Officer of the Guam Power Authority.

**5.1.13. Goods**

Shall refer to all energy production to be furnished by CONTRACTOR under the procurement documents.

**5.1.14. Modification**

A written amendment of the Purchase Agreement signed by both parties, or Change Order, or ENGINEER's Instructions.

**5.1.15. OWNER**

The Guam Power Authority (An autonomous instrumentality of the Government of Guam).

**5.1.16. Point of Delivery**

The place at which property in the goods shall pass to GPA.

**5.1.17. Project**

The plant, or facilities, that will generate energy required in contract

**5.1.18. PURCHASER**

The Guam Power Authority with whom CONTRACTOR has entered into the Contract Agreement.

**5.1.19. Contract Agreement (Agreement)**

The written agreement between GPA and CONTRACTOR covering the furnishing of the Goods, Special Services, and other services in connection therewith evidencing what is contemplated and agreed to between the parties including any other Contract Documents either attached to the Agreement or made a part thereof by reference therein.

**5.1.20. Contract Documents**

The Contract Agreement, Bonds (where required), these General Conditions, any Supplementary Conditions, the Specifications, the Drawings and any other documents specifically identified in the Contract Agreement, together with all Modifications issued after execution of the Contract Agreement.

**5.1.21. Procurement Officer**

The General Manager of the Guam Power Authority or the General Manager's designee.

**5.1.22. CONTRACTOR**

The Bidder with whom GPA has entered into the Contract Agreement.

**5.1.23. SITE or Site**

The SITE is the area where the Project is to be constructed or executed.

**5.1.24. Territory**

The Territory of Guam.

**5.2. Agreement**

Prior to entering into a formal agreement, GPA and CONTRACTOR shall resolve and document any differences between the CONTRACTOR's bid and the IFB documents. The Agreement between GPA and CONTRACTOR shall consist of the IFB documents, as resolved by the CONTRACTOR's final negotiated Bid and by GPA amendments, and the CONTRACTOR's bid, as adjusted by a prioritized list of documents generated during the evaluation and negotiation processes and agreed to and acknowledged in writing by both parties. These documents may consist of, but are not limited to, written answers to questions, letters, and written clarifications to the bid.

Any formal contract document shall reference GPA IFB documents and the CONTRACTOR's bid. No oral understanding or statement shall modify the Agreement. Changes to the above documents can only be made in accordance with the procedure for modifications as defined in Section 5.14 Changes.

The resolved IFB documents shall take priority over and shall govern in all cases of conflict with the adjusted bid. The CONTRACTOR's contractual obligation shall be to fulfill all requirements of the IFB documents, as resolved, and to provide all features of the CONTRACTOR's bid, as adjusted.

The IFB documents are intended to be complementary, what is called for by one shall be as binding as if called for by all. If not otherwise specified in the IFB documents, these General Conditions shall apply. If, during performance of the Agreement CONTRACTOR detects a discrepancy in the IFB documents, CONTRACTOR shall so report to ENGINEER in writing at once and shall obtain a written interpretation or clarification from ENGINEER before proceeding further; however, CONTRACTOR shall not be liable to GPA for failure to report any conflict, error, or discrepancy in the Contract Documents unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

All materials, equipment, and services that may reasonably be inferred from the IFB documents, as being required to produce the intended result will be supplied whether or not specifically called for. When words that have a well-known technical or trade meaning are used to describe materials, equipment, or services, such words will be interpreted in accordance with such meaning. Reference to standard specifications, manuals, or codes of any technical society, organization or association, or to the code of any Governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, or code in effect on the effective date of the Agreement except as may be otherwise specifically stated in the Specification or Agreement. ENGINEER as provided in Section 5.1.11 ENGINEER's Instructions shall issue clarifications and interpretations of the IFB documents.

### 5.3. Indemnity

CONTRACTOR shall indemnify and hold GPA and ENGINEER harmless from any claim, liability or product liability, loss, damage, demand, cause of action or suit, expense, or fee of legal counsel arising out of or in connection with the Goods or Special Services provided by the CONTRACTOR.

### 5.4. Shipment, Delivery, and Acceptance of Goods

Shipment and delivery of the Goods shall be in accordance with this Paragraph except as otherwise provided or specified in the CONTRACT Documents.

All goods will be delivered at the point of delivery set forth in the Purchase Contract. CONTRACTOR shall select the means and methods of transportation. All charges necessary to effect shipment to the point of delivery, including but not limited to export packing, switching, trucking, lighter age, and special handling will be paid by CONTRACTOR.

GPA and/or ENGINEER reserve the right to inspect the Goods upon delivery for the purpose of identifying the Goods and general verification of quantities.

### 5.5. Accounting

For accounting purposes and for use in establishing property records, GPA may require CONTRACTOR to provide a reasonable price breakdown of the total price into separate prices applying to the individual items supplied under the Agreement.

Where the Agreement covers the reimbursement of the traveling or living expenses of the CONTRACTOR's employees or agents, the CONTRACTOR agrees to furnish complete itemization and breakdowns of such expenses when requested by GPA.

In the event of any changes to or termination of the Agreement, or the furnishing of goods or services on a labor hour or a cost reimbursable basis, CONTRACTOR shall supply information in such detail as may be reasonably required by GPA to support all applicable charges. GPA, or an independent auditor



designated by GPA, shall have the right to audit, during normal working hours, CONTRACTOR's accounts and records relating to such charges. The expense of such audit will be borne by GPA.

**5.6. Waiver of Claims**

The making and acceptance of final payment will constitute:

A waiver of all claims by GPA against CONTRACTOR, except claims arising from unsettled liens, claims relative to defective Goods appearing after final payment, or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; nor will final payment constitute a waiver by GPA of any rights in respect of CONTRACTOR's continuing obligations under the Procurement Documents; and

A waiver of all claims by CONTRACTOR against GPA other than those previously made in writing and still unsettled.

**5.7. Supervision and Coordination by CONTRACTOR**

CONTRACTOR shall competently and efficiently manage, supervise, and direct production of the Goods and furnishing of Special Services and coordinate all operations required to deliver the Goods and furnish any required Special Services.

CONTRACTOR shall designate, in writing to GPA, a person with authority to act on behalf of CONTRACTOR with respect to CONTRACTOR's obligations under the CONTRACT Documents, and all communications given to or received from that person will be binding on CONTRACTOR.

CONTRACTOR shall perform all such activities as an independent contractor and not as an agent of GPA. When others furnish materials and equipment for assembly by the CONTRACTOR, CONTRACTOR shall receive, unload, store, and handle it and become responsible therefore as though CONTRACTOR was furnishing such materials and/or equipment under the Agreement.

**5.8. Substitutions**

If CONTRACTOR wishes to furnish or use a substitute item of material or equipment, CONTRACTOR shall make written application to ENGINEER for acceptance thereof certifying that the proposed substitute will perform adequately the function as called for by the general design, be similar and of equal substance to that specified, and be suited to the same use and capable of performing the same function as that specified. The application will state that the evaluation and acceptance of the proposed substitute will not prejudice the CONTRACTOR's warranty or timely delivery of the Goods, whether or not acceptance of the substitute will require a change in any of the Contract Documents to adapt the design to the substitute and whether or not incorporation or use of the substitute in connection with the production of the Goods is subject to payment of any license fee or royalty.

All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair, and replacement service will be indicated. ENGINEER may require CONTRACTOR to furnish at CONTRACTOR's expense such additional data about the proposed substitute as is required by ENGINEER. GPA may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.

### 5.9. Documentation and Drawings

The Agreement will not be deemed satisfactorily completed until all requirements have been complied with including, but not limited to, proper material documentation, final drawings and reproductions, and other requirements stated in the Contract Documents. GPA may withhold final payment hereunder, pending completion of all such requirements by the CONTRACTOR.

At the time of each submission, CONTRACTOR shall in writing call ENGINEER's attention to any deviations that the drawings or documents may have from the requirements of the Specification or Contract Documents. CONTRACTOR shall also direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals. CONTRACTOR's submission of any drawing or document bearing CONTRACTOR's approval shall constitute a representation to GPA and ENGINEER that CONTRACTOR assumes full responsibility for having determined and verified the design criteria, quantities, dimensions, installation requirements, materials, catalog numbers, and similar data and that CONTRACTOR has reviewed or coordinated each drawing or document with the requirements of the Contract Documents.

ENGINEER's review and approval of CONTRACTOR's drawings or documents will be only for conformance with the design concept of the Goods and for compliance with the information given in the Contract Documents. Such review and approval will not extend to design data reflected in drawings or documents that is peculiarly within the special expertise of CONTRACTOR or any party dealing directly with CONTRACTOR. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. CONTRACTOR shall make corrections required by ENGINEER when drawings or documents are marked "Approved As Revised" and shall return the required number of corrected copies.

GPA and/or ENGINEER shall have the right to reproduce any and all drawing, prints, or other data or documents received from CONTRACTOR that are considered necessary for engineering, construction, or other purposes, despite any notice to the contrary appearing on the item. When a drawing or document approval is required by the Specifications, CONTRACTOR shall not commence production of any part of the Goods affected thereby until such drawing or document has been reviewed and approved by ENGINEER.

ENGINEER's review and approval of CONTRACTOR's drawings or documents will not relieve CONTRACTOR from responsibility for any deviations from the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to such deviation at the time of submission and ENGINEER has given written concurrence and approval to the specific deviation, nor will any concurrence or approval by ENGINEER relieve CONTRACTOR from responsibility for errors or omissions in the drawings or documents submitted.

### 5.10. Continuing Performance

CONTRACTOR shall continue its performance under the Agreement during all claims, disputes, or disagreements with GPA. Production of Goods will not be delayed or the timely delivery of Goods or furnishing of Special Services be prejudiced, delayed, or postponed pending resolution of any claims, disputes, or disagreements, except as CONTRACTOR and GPA may otherwise agree in writing.

### 5.11. Expediting

CONTRACTOR shall expedite delivery of the Goods and any related work of subcontractors. When requested or required by the Contract Documents, CONTRACTOR shall also provide GPA with an itemized schedule for engineering, outsourcing, fabrication, and shipping, which shall be followed by expediting reports including status of deliveries of materials and/or equipment purchased from subcontractors, if any, each month during its performance under the Agreement. If CONTRACTOR encounters delay in obtaining materials, or foresees any delay in its own manufacturing works, CONTRACTOR shall immediately inform GPA of such situation.

GPA and/or its designee shall be allowed reasonable access to CONTRACTOR's and its subcontractor's works for the purpose of expediting project progress. Any expediting done by GPA shall not relieve CONTRACTOR from its obligations as to the Delivery Time specified in the Agreement.

#### **5.12. Compliance with Law**

CONTRACTOR shall comply, and secure compliance by its subcontractors, with all applicable laws or regulations in connection with the Goods and services furnished hereunder. This includes the securing of any business or other licensing, certifications, or permits required.

If CONTRACTOR discovers any variance between the provisions of applicable laws and regulations and the drawings, Specifications, and other technical data furnished by the GPA, CONTRACTOR shall promptly notify GPA in writing thereof and obtain necessary changes from GPA before proceeding with the work affected thereby.

#### **5.13. Price Adjustment**

##### **5.13.1. Price Adjustment Methods**

Any adjustment in contract price within the parameters of this contract shall be made in one or more of the following ways:

- a) By agreement on a fixed price adjustment before commencement of the pertinent performance or as soon thereafter as practicable;
- b) By unit prices specified in the contract or subsequently agreed upon;
- c) By the costs attributable to the event or situation covered by the clause, plus appropriate profit or fee, all as specified in the contract or subsequently agreed upon;
- d) In such other manner as the parties may mutually agree; or
- e) In the absence of agreement between the parties, by a unilateral determination by the Procurement Officer of the costs attributable to the event or situation covered by the clause, plus appropriate profit or fee, all as computed by the Procurement

##### **5.13.2. Submission of Cost or Pricing Data**

The CONTRACTOR shall provide cost or pricing data for any price adjustments subject to the provisions of Section 3-403 (Cost or Pricing Data) of the Guam Procurement Regulations in Appendix N.

**5.14. Changes**

**5.14.1. Change Order**

By a written order, at any time, and without notice to surety, the Procurement Officer may, subject to all appropriate adjustments, make changes within the general scope of this contract in any one or more of the following:

- a) Drawings, designs, or Specifications, if the supplies to be furnished are to be specially manufactured for the Territory in accordance therewith;
- b) Method of shipment or packing; or
- c) Place of delivery.

**5.14.2. Time Period for Claim**

Within 30 days after receipt of a written change order under Paragraph 5.14.1 Change Order, unless the Procurement Officer extends such period in writing or e-mail, The CONTRACTOR shall file notice of intent to assert a claim for an adjustment. Later notification shall not bar the CONTRACTOR's claim unless the Territory is prejudiced by the delay in notification.

**5.14.3. Claims Barred After Final Payment**

No claim by the CONTRACTOR for an adjustment hereunder shall be allowed if notice is not given prior to final payment under this contract.

**5.14.4. Other Claims Not Barred**

In the absence of such a change order, nothing in this clause shall be deemed to restrict the CONTRACTOR's right to pursue a claim arising under the contract if pursued in accordance with the clause entitled, "Claims Based on the General Officer's Actions or Omissions, - Notice of Claim", or for breach of contract.

**5.15. Contract Price**

The Contract Price constitutes the total consideration to be paid by GPA to the CONTRACTOR for the complete delivery of the Goods, Special Services, and for performing other services in connection therewith in accordance with the Contract Documents as amended by the parties pursuant to the Agreement. Unless expressly provided otherwise in the Contract Documents, the Contract Price is not subject to escalation in respect of materials and/or labor cost or any other factor or variation in rates of exchange, and all duties, responsibilities, and obligations assigned to or undertaken by the CONTRACTOR shall be at its expense without change in the Contract Price. Charges, fees, CONTRACTOR's profit, and all other expense shall be deemed to be included in the Contract Price.

**5.16. Payment Milestones and Schedule**

Payment milestones have been selected to clearly identify the actual status of the portion of the Work completed rather than anticipated project progress schedules. Payments will be based on actual completion of each milestone event, where applicable, and not on the scheduled completion date. When a change in the Agreement is approved, the total contract price will be altered to the new total, and the remaining milestone payments will be adjusted.

Milestones shall not be scheduled more frequently than once every month. GPA will not approve a milestone payment until all preceding milestones have been approved. GPA will make payments within thirty days from receipt and approval of the invoice for the completed milestone.

The payment milestones for monies due to the CONTRACTOR from GPA are as follows:

- Monthly invoice for Energy delivered at the contract price

The payment milestones for monies due to GPA from the CONTRACTOR are as follows:

- Penalty Payments due to liquidated damages from CONTRACTOR's failure to meet its original Commission Date.
- Penalty Payments due to CONTRACTOR's failure to meet its Guaranteed Minimum Annual Energy Production.

#### **5.17. Force Majeure**

Force Majeure referred to herein shall mean an occurrence beyond the control and without the fault or negligence of the party affected including, but not limited to, acts of God or the public enemy, expropriation or confiscation; changes in law procedures, war, rebellion, or riots; floods, unusually severe weather that could not reasonably have been anticipated; fires, explosions, epidemics, catastrophes, or other similar occurrences which are not within the control of the party affected. However, the following shall not be considered as Force Majeure:

- a) Delay caused by lack or inability to obtain raw materials, congestion at CONTRACTOR's or its subcontractor's facilities, or elsewhere; market shortages, or similar occurrences, or
- b) Delay, either on the part of the CONTRACTOR or its subcontractors, caused by shortages of supervisors or labor, inefficiency, or similar occurrences, or
- c) Sabotage, strikes, or any other concerted acts of workmen, which occur only in the facilities of the CONTRACTOR or its subcontractors.

Should the circumstances of Force Majeure continue over a period of ninety (90) days, GPA has the right, if no other understanding is reached, to terminate the whole Agreement or any part thereof in accordance with Paragraph 4.21. Any delay or failure in performing the obligations under the Contract Documents of the parties hereto shall not constitute default under the Purchase Contract or give rise to any claim for damages or loss or anticipated profits if, and to the extent, such delay or failure is caused by Force Majeure, and if a claim is made therefore.

##### **5.17.1. Invocation of Force Majeure**

The party invoking Force Majeure shall perform the following:

- a) Notify the other party as soon as reasonably possible by facsimile, e-mail, telex, cable or Messenger/courier of the nature of Force Majeure, anticipated exposure time under Force Majeure, and the extent to which the Force Majeure suspends the affected party's obligations under the CONTRACT;

- b) Consult with the other party and take all reasonable, prudent steps to minimize the losses of either party resulting from the Force Majeure;
- c) Resume the performance of its obligations as soon as possible after the Force Majeure condition ceases.

**5.17.2. Delivery Time and Force Majeure**

Only a Change Order may change contractual Delivery Times. The CONTRACTOR as provided in Paragraph 5.14 Changes and its sub-paragraphs shall file all claims for an extension in the Delivery Time.

The Delivery Time will be extended in an amount equal to time lost due to delays caused by Force Majeure if a claim is made therefore as provided in this Paragraph. No amendment to the Contract Price, however, shall be allowable because of Force Majeure occurrences.

Notwithstanding the foregoing, all time limits stated in the Purchase Order documents are of the essence in the agreement. The provisions of this Paragraph shall not exclude recovery for damages (including compensation for additional professional services) for delays not caused by Force Majeure.

**5.18. Warranty**

The CONTRACTOR'S obligation to furnish the Goods and Special Services and to perform other services in connection therewith in accordance with the Agreement is absolute, and the CONTRACTOR warrants and guarantees to GPA that all Goods will be in accordance with the Contract Documents and will be new, fit for the purpose for which they are intended, and free from any defects, including faulty design, materials, or workmanship.

The CONTRACTOR shall provide GPA with all warranties and guarantees in writing. GPA and the Bidder shall negotiate the manner in which claims against these warranties are addressed including any remedies for non-responsiveness. This may include retention of contract amounts, performance bonds, etc.

The CONTRACTOR shall be responsible for remedying all defects, without limitation, in design, materials, workmanship, operating characteristics, or performance of the Goods developing within twelve (12) months from the date on which GPA has placed the Goods in continuous service, or within twenty-four (24) months from the date of final payment, whichever date shall first occur, or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee or by any specific provisions of the Contract Documents.

Any part(s) supplied in replacement of the defective part(s) of the Goods or any Goods repaired pursuant to the provisions of this Paragraph shall be supplied or repaired on the same terms and conditions as provided for herein for the supply of the Goods and in particular a new warranty period shall apply. Such new warranty period shall expire on the date twelve (12) months from the date of such replacement or repair or on the expiration date of the warranty for the original Goods that were replaced or repaired, whichever is later.

In the event the CONTRACTOR furnishes special services for installation and startup, such services shall be rendered in a competent and diligent manner and in accordance with the Contract Documents, accepted industry practice and any applicable professional standards.

#### **5.19. Tests and Inspections**

GPA or its designee shall have the right to inspect or observe the production, inspection, or testing of the Goods at any time and place including the CONTRACTOR's facilities and those of its subcontractors where the Goods are being produced.

The CONTRACTOR shall conduct, at its responsibility and expense, all tests and inspections called for by the Contract Documents. In the event that witness inspection by GPA is required under the Contract Documents, the costs and expense arising therefrom shall be borne by the CONTRACTOR, including inspector's fees, transportation, hotel, and general flying expenses. In the event that CONTRACTOR's inspection is required at the site, CONTRACTOR's transportation, hotel, and general living expenses shall be borne by The CONTRACTOR.

Any inspection made by the inspector of GPA and/or its designee will be final. Such inspections or the witnessing of CONTRACTOR's test and inspection by GPA and/or its designee shall not relieve The CONTRACTOR of any of its responsibilities or liabilities under the Contract Documents, nor be interpreted in any way as implying acceptance of the Goods.

The CONTRACTOR shall repair and replace, without cost or delay, anything found defective by tests and inspections, and also to bear all costs of re-inspection.

The CONTRACTOR must carry out at its authority and expense any inspection required by statutory Authority, governmental regulation, or other similar Authority on the codes or standards.

#### **5.20. Stop Work Order**

##### **5.20.1. Order to Stop Work**

The Procurement Officer may, by written order to the CONTRACTOR, at any time, and without notice to any surety, require the CONTRACTOR to stop all or any part of the work called for by this contract. This order shall be for a specified period not exceeding ninety-days (90-days) after the order is delivered to the CONTRACTOR, unless the parties agree to any further period. Any such order shall be identified specifically as a stop work order issued pursuant to this clause. Upon receipt of such an order, the CONTRACTOR shall forthwith comply with its terms and take all reasonable steps to minimize the occurrence of costs allocable to the work covered by the order during the period of work stoppage. Before the stop work order expires, or within any further period to which the parties shall have agreed, the Procurement Officer shall either:

- a) Cancel the stop work order; or
- b) Terminate the work covered by such order, as provided in the 'Termination for Default Clause' or the 'Termination for Convenience Clause' of this contract.

##### **5.20.2. Cancellation or Expiration of the Order**

If a stop work order issued under this clause is canceled at any time during the period specified in the order, or if the period of the order or any extension thereof expires, the CONTRACTOR shall have the right to resume work. An appropriate adjustment shall be made in the delivery schedule or contract price shall be modified in writing accordingly, if:

- a) The stop work order results in an increase in the time required for, or in the CONTRACTOR's cost properly allocable to, the performance of any part of this contract; and
- b) The CONTRACTOR asserts a claim for such an adjustment within thirty (30) days after the end of the period of work stoppage; provided that, if the Procurement Officer decides that the facts justify such action, any such claim asserted may be received and acted upon at any time prior to final payment under this contract.

**5.20.3. Termination of Stopped Work**

If a stop work order is not canceled and the work covered by such order is terminated for default or Convenience, the reasonable costs resulting from the stop work order shall be allowed by adjustment or otherwise.

**5.21. Termination for Convenience**

**5.21.1. Termination**

The Procurement Officer may, when the interest of GPA or the Territory so require, terminate this contract in whole or in part, for the Convenience of the Territory. The Procurement Officer shall give written notice of the termination to the CONTRACTOR specifying the part of the contract terminated and when termination becomes effective. [GSA Procurement Regulations 6-101.10.] Please see APPENDIX N for a copy of GSA Procurement Regulations 6-101.10.

**5.21.2. CONTRACTOR's Obligations**

The CONTRACTOR shall incur no further obligations in connection with the terminated work and on the date set in the notice of termination the CONTRACTOR will stop work to the extent specified. The CONTRACTOR shall also terminate outstanding orders and subcontracts as they relate to the terminated work. The CONTRACTOR shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated work. The Procurement Officer may direct the CONTRACTOR to assign the CONTRACTOR's right, title, and interest under terminated orders or subcontracts to the GPA. The CONTRACTOR must still complete the work not terminated by the notice of termination and may incur obligations as are necessary to do so.

**5.21.3. Right to Supplies**

The Procurement Officer may require the CONTRACTOR to transfer title and deliver to GPA in the manner and to the extent directed by the Procurement Officer:

- a) Training material;
- b) Any completed supplies; and,
- c) Such partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information and contract rights (hereinafter called "manufacturing material") as the CONTRACTOR has specifically produced or specially acquired for the performance of the terminated part of this contract.



The CONTRACTOR shall, upon direction of the Procurement Officer, protect and preserve property in the possession of the CONTRACTOR in which the Territory has an interest. If the Procurement Officer does not exercise this right, the CONTRACTOR shall use best efforts to sell such supplies and manufacturing materials in accordance with the standards of **Uniform Commercial Code of Guam (UCCG), Section 2706**. Utilization of this Section in no way implies that the Territory has breached the contract by exercise of the Termination for Convenience Clause.

**5.21.4. Compensation Under Termination for Convenience**

The CONTRACTOR shall perform the following for compensation under termination for convenience.

- a) The CONTRACTOR shall submit a termination claim specifying the amounts due because of the termination for Convenience together with cost or pricing data to the extent required by **Section 3-403 (Cost or Pricing Data) of the Guam Procurement Regulations** bearing on such claim. If the CONTRACTOR fails to file a termination claim within one year from the effective date of termination, the Procurement Officer may pay the CONTRACTOR, if at all, an amount set in accordance with subparagraph (c) of this Paragraph. Please see APPENDIX N for a copy of **Section 3-403 (Cost or Pricing Data) of the Guam Procurement Regulations**.
- b) The Procurement Officer and the CONTRACTOR may agree to a settlement provided the CONTRACTOR has filed a termination claim supported by cost or pricing data to the extent required by **Section 3-403 (Cost or Pricing Data) of the Guam Procurement Regulations** and that the settlement does not exceed the total contract price plus settlement costs reduced by payments previously made by GPA, the proceeds of any sales of supplies and manufacturing materials, and the contract price of the work not terminated.
- c) Absent complete agreement under Subparagraph (b) of this Paragraph, the Procurement Officer shall pay the CONTRACTOR the following amounts, provided payments agreed to under Subparagraph (b) shall not duplicate payments under this subparagraph:
  - i. Contract prices for supplies or services accepted under the contract;
  - ii. Costs incurred in preparing to perform and performing the terminated portion of the work plus a fair and reasonable profit on such portion of the work (such profit shall not include anticipatory profit or consequential damages) less amounts paid or to be paid for accepted supplies or services; provided, however, that if it appears that the CONTRACTOR would have sustained a loss if the entire contract would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss;
  - iii. Costs of settling and paying claims arising out of the termination of subcontracts or orders pursuant to Paragraph 5.21.2 Contractor's Obligations of this clause. These costs must not include costs paid in accordance with other subparagraphs of this Paragraph;
  - iv. The reasonable settlement costs of the CONTRACTOR including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the contract for the termination and settlement of subcontracts there under, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of

property allocable to the terminated portion of this contract. The total sum to be paid to the CONTRACTOR under this Subparagraph shall not exceed the total contract price plus the reasonable settlement costs of the CONTRACTOR reduced by the amount of payments otherwise made, the proceeds of any sales of supplies and manufacturing materials under subparagraph (b) of this Paragraph, and the contract price of work not terminated.

- d) Cost claimed, agreed to, or established under subparagraph (b) and (c) of this Paragraph shall be in accordance with Chapter 7 (Cost Principles) of the Guam Procurement Regulations, 13 GCA 2796 (UCCG) states:

**2706. SELLER's Resale Including contract for Resale**

- (1) Under the conditions stated in Section 2703 on CONTRACTOR's remedies, the CONTRACTOR may resell the goods concerned or the undelivered balance thereof. Where the resale is made in good faith and in a commercially reasonable manner the CONTRACTOR may recover the difference between the resale price and the contract price together with an incidental damages allowed under the provisions of this division (Section 2710), but less expenses saved in consequence of the buyer's breach.
- (2) Except as otherwise provided in Subsection (3) or unless otherwise agreed resale may be at public or private sale including sale by way of one or more contracts to sell or of identification to an existing contract of the CONTRACTOR. Sale may be as a unit or in parcels and at any time and place and on any terms, but every aspect of the sale including the method, manner, time, place and terms must be commercially reasonable. The resale must be reasonably identified as referring to the broken contract, but it is not necessary that the goods be in existence or that any or all of them have been identified to the contract before the breach.
- (3) Where the resale is at private sale the CONTRACTOR must give the buyer [i.e., GPA] reasonable notification of his intention to resell.
- (4) Where the resale is at public sale:
  - (1) Only identified goods can be sold except where there is a recognized market for a public sale of futures in goods of the kind; and
  - (2) It must be made at a usual place or market for public sale if one is reasonably available and except in the case of goods which are perishable or threaten to decline in value speedily the CONTRACTOR must give the buyer [i.e., GPA] reasonable notice of the time and place of the resale; and,
  - (3) If the goods are not to be within the view of those attending the sale, the notification of sale must state the place where the goods are located and provide for their reasonable inspection by prospective Bidders; and
  - (4) The CONTRACTOR may buy.

- (5) A purchaser who buys in good faith at a resale takes the goods free of any rights of the original buyer [i.e., GPA] even though the CONTRACTOR fails to comply with one or more of this section's requirements.
- (6) The CONTRACTOR is not accountable to the buyer [i.e., GPA] for any profit made on any resale. A person in the position of a CONTRACTOR (Section 2707) or a buyer who has rightfully rejected or justifiably revoked acceptance must account for any excess over the amount of his security interest, as hereinafter defined (Subsection 3) of Section 2711."

## **5.22. Termination for Defaults**

### **5.22.1. Default**

If the CONTRACTOR refuses or fails to perform any of the provisions of this contract with such diligence as will ensure its completion within the time specified in this contract, or any extension thereof, otherwise fails to timely satisfy the contract provisions, or commits any other substantial breach of this contract, the Procurement Officer may notify the CONTRACTOR in writing of the delay or non-performance and if not corrected in ten days or any longer time specified in writing by the Procurement Officer, such officer may terminate the CONTRACTOR's right to proceed with the contract or such part of the contract as to which there has been delay or a failure to properly perform. In the event of termination in whole or in part the Procurement Officer may procure similar supplies or services in a manner and upon terms deemed appropriate by the Procurement Officer. The CONTRACTOR shall continue performance of the contract to the extent it is not terminated and shall be liable for excess cost incurred on procuring similar goods or services.

### **5.22.2. CONTRACTOR's Duties**

Notwithstanding termination of the contract and subject to any directions from the Procurement Officer, the CONTRACTOR shall take timely, reasonable, and necessary action to protect and preserve property in the possession of the CONTRACTOR in which GPA has an interest.

### **5.22.3. Compensation**

Payment for completed supplies delivered and accepted by the GPA shall be at the contract price. Payment for the protection and preservation of property shall be in an amount agreed upon by the CONTRACTOR and the Procurement Officer; if the parties fail to agree, the Procurement Officer shall set an amount subject to the CONTRACTOR's rights under Chapter 9 (Legal and Contractual Remedies) of the Guam Procurement Regulations. The GPA may withhold from amounts due the CONTRACTOR such sums as the Procurement Officer deems to be necessary to protect the GPA against loss because of outstanding liens or claims of former lien holders and to reimburse the PURCHASER for the excess costs incurred in procuring similar goods and services.

### **5.22.4. Excuse for Nonperformance or Delayed Performance**

Except with respect to defaults of subcontractors, the CONTRACTOR shall not be in default by reason of any failure in performance of this contract in accordance with its terms (including any failure by the CONTRACTOR to make progress in the prosecution of the work hereunder which endangers such performance) if the CONTRACTOR has notified the Procurement Officer within fifteen (15) days after the cause of the delay and the failure arises out of causes such as: acts of God; acts of the public enemy;

act of the Territory and any other governmental entity in its sovereign restrictions; strikes or other labor disputes; freight embargoes; or unusually severe weather. If the failure to perform is caused by the failure of a subcontractor to perform or to make progress, and if such failure arises out of causes similar to those set forth above, the CONTRACTOR shall not be deemed to be in default, unless the supplies or services to be furnished by the subcontractor were reasonably obtainable from other sources in sufficient time to permit the CONTRACTOR to meet the contract requirements. Upon request of the CONTRACTOR, the Procurement Officer shall ascertain the facts and extent of such failure, and, if such officer determines that any failure to perform was occasioned by any one or more of the excusable causes, and that, but for the excusable cause, the CONTRACTOR's progress and performance would have met the terms of the contract, the delivery schedule shall be revised accordingly, subject to the rights of the GPA under the clause entitled "Termination For Convenience", Paragraph 5.21. (As used in the Paragraph of this clause the term "subcontractor" means subcontractor at any tier.)

**5.22.5. Erroneous Termination for Default**

If, after notice of termination of the CONTRACTOR's right to proceed under the provisions of this clause, it is determined for any reason that the CONTRACTOR was not in default under the provisions of this clause, or that the delay was excusable under the provisions of Paragraph 5.22.4(Excuse for Nonperformance or Delayed Performance) of this clause, the rights and obligations of the parties shall, if the contract contains a clause providing for termination for Convenience of GPA, be the same as if the notice of termination had been issued pursuant to such clause. If, in the foregoing circumstances, this contract does not contain a clause providing for termination for Convenience of GPA, the contract shall be adjusted to compensate for such termination and the contract modified accordingly subject to the CONTRACTOR's rights under Chapter 9 (Legal and Contractual Remedies) of the Guam Procurement Regulations.

**5.22.6. Additional Rights and Remedies**

The rights and remedies provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

**5.23. Disputes**

All controversies between GPA and the CONTRACTOR, which arise under, or are by virtue of, this contract and which are not resolved by mutual agreement, shall be resolved under Guam Procurement Law and the Government Claims Act.

**5.24. Consequential Damages**

Unless expressly provided for otherwise in this Agreement, neither party, including their agents and employees, shall be liable to the other party for consequential damages, including, but not limited to, loss of use, loss of profit and interest due to breach of contract, breach of warranty, negligence, or any other cause whatsoever, provided nothing herein shall relieve CONTRACTOR from its liability for injury to persons or property, including property of GPA, whether such liability arises in contract, including breach of warranty, or tort, including negligence.

**5.25. Notices**

Whenever any provision of the Contract Documents requires the giving of written notice it shall be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to

an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

**5.26. Computation of Time**

When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the time computation.

**5.27. Language and Trade Terms**

All communications, documents, and execution of services hereunder, unless otherwise designated, shall be in the English language. INCOTERMS (International Rules for the Interpretation of Trade Terms) published by the International Chamber of Commerce in 1980 and any subsequent revisions thereto shall govern interpretation of trade terms in the Contract Documents

**5.28. Governing Law**

The laws of Guam shall govern the validity and interpretation of these conditions, the Agreement and legal relations of the parties.

CONTRACTOR shall not transfer or assign without the prior written consent of GPA. The Draft Power Purchase Agreement in Volume III of this bid, Article Eleven, outlines requirements for assignment.

CONTRACTOR shall not sublet the Agreement in whole or in part without the prior written consent of GPA. Written consent of GPA for subletting shall not relieve CONTRACTOR of any of his obligations under the Agreement.

**5.29. Non-waiver**

GPA shall not consider any provisions of this Agreement waived unless GPA gives notice of such waiver in writing. Even if such notice has been given, such waiver shall not be construed as being a waiver of any other past or future right of GPA under the provisions of this Agreement, unless otherwise expressly stipulated therein. Failure of GPA to insist upon strict performance of any of the terms and conditions hereof, or failure or delay of GPA to insist upon strict performance of any of the terms and conditions hereof, or failure or delay of GPA to exercise any acts, rights, or remedies provided herein or by law shall not relieve CONTRACTOR of liability under any guarantees or of obligations under the Agreement and shall not be deemed a waiver of any right of GPA to insist upon strict fulfillment of the Agreement or of any of GPA's rights or remedies as to the Goods furnished.

**5.30. Severability**

If any work, phrase, clause, article, or other provision of this Agreement is or is deemed or adjudicated or otherwise found to be against public policy, void, or otherwise unenforceable, then said work, phrase, clause, article, or other provision shall be deleted or modified, in keeping with the express intent of the parties hereto as necessary to render all the remainder of this Agreement valid and enforceable. All such deletions or modifications shall be the minimum necessary to effect the foregoing.

**5.31. Rights and Remedies**

The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, will be in addition to, and shall not be construed in any way as a limitation of any rights and remedies available to any or all of them which are otherwise imposed or available by law or contract, by special warranty or guarantee, or by other provisions of the Contract Documents, and the provisions of this paragraph shall be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply. All representations, warranties, and guarantees made in the Contract Documents will survive final payment and termination or completion of this Agreement.

**5.32. Claims based on the General Manager's Action or Omissions**

If any action or omission on the part of the General Manager, or his/her designee, requiring performance changes within the scope of the contract constitutes the basis for a claim by the CONTRACTOR for additional compensation, damages, or an extension of time for completion, the CONTRACTOR shall continue with performance of the contract in compliance with the directions or orders of such officials, but by so doing, the CONTRACTOR shall not be deemed to have prejudiced any claim for additional compensation, damages, or an extension of time for completion; provided:

- (1) The CONTRACTOR shall have given written notice to the General Manager, or his/her designee:
  - i. Prior to the commencement of the work involved, if at that time the CONTRACTOR knows of the occurrence of such action or omission;
  - ii. Within thirty (30) days after the CONTRACTOR knows of the occurrence of such action or omission, if the CONTRACTOR did not have such knowledge prior to the commencement of the work; or
  - iii. Within such further time as may be allowed by the Procurement Officer in writing. This notice shall state that the CONTRACTOR regards the act or omission as a reason that may entitle the CONTRACTOR to additional compensation, damages, or an extension of time. The Procurement Officer or designee of such officer, upon receipt of such notice, may rescind such action, remedy such omission, or take such other steps as may be deemed advisable in the discretion of the Procurement Officer or designee of such officer.
- (2) The notice required by subparagraph (1) of this Paragraph describes as clearly as practicable at the time the reasons why the CONTRACTOR believes that additional compensation, damages, or an extension of time may be remedies to which the CONTRACTOR is entitled; and
- (3) The CONTRACTOR maintains and, upon request, makes available to the Procurement Officer within a reasonable time, detailed records to the extent practicable, of the claimed additional costs or basis for an extension of time in connection with such changes.

**5.32.1. Limitations of Clause**

Nothing herein contained shall excuse the CONTRACTOR from compliance with any rules of law precluding GPA and its officers and any CONTRACTORS from acting in collusion or bad faith in issuing or performing change orders that are clearly not within the scope of the contract.

**5.33. Standard Work Schedule**

Work scheduled and performed by the CONTRACTOR on GPA's premises shall conform to published GPA working hours and shall account for GPA's observed holidays.

**5.34. Interference with Operation**

Interference with normal operation of GPA's facilities or equipment, or that of any CONTRACTORS or subcontractors on GPA's premises, shall be avoided. The GPA's representative will determine in advance whether such interference is unavoidable and will establish the necessary procedures under which the interferences will be allowed.

**5.35. Release of Information**

The CONTRACTOR shall not release any information, including the contract price concerning this project or any part thereof in any form, including advertising, news releases, or professional articles, without written permission of GPA.

**5.36. Liens**

In the event that a lien of any nature shall at any time be filed against the hardware, firmware, or software or the CONTRACTOR's facility by any person, firm, or corporation which has supplied material or services at the request of the CONTRACTOR, and for the cost of which the CONTRACTOR is liable under the terms of the Agreement, the CONTRACTOR agrees, promptly on demand of GPA and at the CONTRACTOR's expense, to take any and all action necessary to cause any such lien to be released or discharged therefrom. The CONTRACTOR agrees to hold GPA harmless from all liens, claims, or demands in connection with the Work.

**5.37. Insurance**

Contractor shall not commence work under this contract until he has obtained all insurance required under this section and GPA has approved such insurance, nor shall the Contractor allow any Subcontractor to commence work on this subcontract until all similar insurance required of the Subcontractor has been so obtained and approved. He shall maintain all insurance required during the course of the work.

**5.38. Contractors and Subcontractors Insurance**

Prior to commencing the work, which includes construction and operation activities, contractor shall obtain and thereafter maintain during the course of the work insurance with companies acceptable to GPA. The contractor shall not allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been so obtained and approved. The limits of insurance shall be as follows unless a higher limit is required by statute:

1. General Liability including products, completed operations and contractual coverage for this Agreement in the amount of \$1,000,000 combined limit. Owner shall be an additional insured. Grant Waiver of Subrogation in favor of GPA.
  2. Auto Liability covering bodily injury and property damage in the amount of \$1,000,000 combined single limit. Owner shall be an additional insured. Grant Waiver of Subrogation in favor of GPA.
-

3. Excess Liability with limits of \$5,000,000 or higher. Owner shall be an additional insured. Grant Waiver of Subrogation in favor of GPA.
4. Worker's Compensation and Employer's Liability – Statutory limits. Add Waiver of Subrogation endorsement in favor of GPA
5. Builder's Risk or Installation Floater, when applicable, is to be furnished by Contractor.
6. Pollution Liability, when applicable, with limits of \$5,000,000. GPA is to be an additional insured. Grant Waiver of Subrogation in favor of GPA.
7. Property insurance with replacement cost limits for the premises, property, improvements, structures, and machinery and equipment on the Premises
8. Business Income and Extra Expense with a \$3,000,000 limit or whatever is deemed appropriate by GPA upon award.

**5.38.1. Indemnification**

The Contractor shall indemnify, defend and hold harmless GPA against all loss, damage, or expense (including reasonable attorney's fees incurred by GPA) arising out of the performance of the work, including injury or death to any person or persons resulting from the acts or omission of the Contractor or the Contractor's employees, servants, agents or subcontractors and from mechanics and materialism liens

**5.38.2. Certificate of Insurance**

Contractor shall furnish certificates of insurance and waiver of subrogation endorsement to GPA prior to commencement of work showing evidence of such coverage, including the statement to the effect that cancellation or termination of the insurance shall not be effective until at least (30) days after receipt of written notice to GPA. At all times Contractor's insurance shall be primary to any other insurance that may be carried by GPA. The statement of limits of insurance coverage shall be construed as in any way limiting the Contractor's liability under this agreement. GPA shall be an additional insured on all liability coverage and certificates of insurance shall clearly indicate such.

**5.38.3. Insurance Company and Agent**

All insurance policies herein required of the Contractor shall be written by a company duly authorized and licensed to do business in the State or Territory where work under this contract is being performed and be executed by some agent thereof duly licensed as an agent in said State or Territory.

**5.38.4. Waiver of Subrogation**

Contractor hereby releases GPA and their respective officers, employees, and agents from all loss or damage to the Premises and to the fixtures, personal property, equipment and improvements of Contractor in or on the Premises, notwithstanding that any such loss or damage may be due to or result from the negligence of GPA or their respective officers, employees or agents.



**INVITATION FOR MULTI-STEP BID**

**NO.: GPA-XXX-17**

**RENEWABLE ENERGY RESOURCE**

**PHASE III**



**Volume II**

**Technical Qualification Proposal Requirements**

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## 1. OVERVIEW

In this Invitation for Multi-Step Bid ("IFB"), GPA is seeking competitive bids for renewable energy resources to meet a portion of its overall resource needs. For selected Bidder(s), GPA will execute purchase power agreements for delivery of renewable to the 34.5 kV GPA transmission system. GPA intends to procure a total of 40 MW (AC) renewable capacity, based on proposed sites, in this Phase II acquisition that can meet the following established requirements:

1. The Bidder's renewable resource project shall have a maximum export capacity 30 MW (AC) at the interconnection point; this may be the combination of several generation units at one site.
2. The renewable energy project must provide a dispatchable reactive capability requirement up to 0.95 lag to lead at the point of interconnection as required by GPA Power System Operators or SCADA Control Point. For example, in the course of normal operations, the renewable energy resource may be called to provide electric power range from 28.5 MW and -9.4 MVARs through 30 MW at Unity Power Factor to 28.5 MW and 9.4 MVARs. The project shall perform at +/- 0.95 PF dynamic range up to and including the maximum MW output, and shall not reduce reactive capability near the peak real power output.
3. The renewable generation ramp limit shall be 1% of the project nameplate capacity per minute. This shall be the net ramp rate including the benefit of an energy storage system if needed.
4. The renewable energy project shall incorporate an energy storage system (ESS) that will meet GPA's requirements as described in section 2.2.
5. The ESS must provide the following functions:
  - o The primary purpose of the ESS shall be for energy shifting which is to deliver the solar produced energy at another time or period of the day.
  - o The additional function of the ESS shall be Renewable integration (RI-ESS). If and when required, i.e. GPA allows delivery directly to the grid, the RI-ESS must provide the following functions:
    - i. Significantly reduce the impact of intermittent ("non-firm") renewable energy generation power fluctuations on GPA's power system frequency and voltage at the point of interconnection
    - ii. Achieve this by providing a supporting energy storage system to quickly respond to the variable renewable generation output and ameliorate the power imbalance within GPA's power grid or an assigned local micro grid.
    - iii. Providing highly reliable fault recovery and optimizing power distribution
    - iv. Provide a dispatchable reactive capability as required by GPA Power System Control Center Dispatchers.

Commented [JGS1]: Added new sentence

Commented [JGS2]: Changed "alternate" to additional

Persons or entities responding to this IFB are referred to herein as "Bidder(s)."

## 2. PRODUCT DESCRIPTION

The bids for renewable resources shall be developed based on the requirements described below and outlined in the Qualitative Scoring Workbook provided with the bid documents.

### 2.1. Product and Term

GPA seeks to acquire energy from renewable resource projects based on an 'annual minimum quantity' of energy under the terms of the Renewable Energy Purchase Agreement (See Volume III).

Projects in this acquisition phase are required to be operational and delivering renewable energy on or before 36 months from the contract award date. The term of the Renewable Energy Purchase Agreement will be 20 years. Prior to the expiration of the twenty-year contract period, GPA may extend the contract for two (2) additional five-year terms.

**2.2. Technology**

**2.2.1. Acceptable Renewable Technologies**

Only Solar Photovoltaic systems shall be proposed for this bid. Under no circumstances will energy from non-renewable resources be acceptable for delivery under the proposed agreement.

**2.2.2. Acceptable ESS Technologies**

Acceptable ESS technologies in this IFB include batteries, flywheels, pumped hydroelectric storages, thermal and compressed air energy storages.

**2.2.2.1 ESS Technical Requirements**

ESS shall have 1% ramp rate control per minute of the project nameplate renewable capacity with the guaranteed success rate for the contract period.

Commented [JGS3]: Changed from "within one minute"

**a. Real Power and Energy Requirements**

The fully functional operating range of the ESS, with respect to energy, is defined in this specification as 0-100% State of Charge (SOC). This means that if the Bidder's proposed system is recommended or required to operate within the ESS manufacturer's stated specifications with a minimum SOC greater than 0% or a maximum charge less than 100%, then the Bidder must adjust the manufacturer's stated specifications to the fully functioning operating range of the ESS. For instance, if the manufacturer's specifications recommend operating the ESS within the range of 10-90% SOC, the total amount of available energy must be reduced by 20% to correspond to the 0-100% SOC range as defined for this IFB.

**b. Reactive Power Requirements**

The ESS shall have the capability to output up to the nominal real power capacity magnitude on a continuous basis. The real power order of the ESS shall take priority over the reactive power order. If the nominal real power capacity rating cannot be met, Bidders are encouraged to describe the reactive power capabilities of their proposed system and provide a reactive power capability curve. The RI-ESS must provide a dispatchable reactive capability as required by GPA Power System Control Center Dispatchers. The Reactive and Real Power Capability must be communicated to the GPA SCADA Master every two (2) seconds.

Commented [JGS4]: Need to discuss this statement with EPS. Consider removing for now or place a statement that GPA is evaluating real power order over reactive power order.

Commented [JGS5]: Added language

**c. Response Times**

The ESS shall have the ability to change its output power from 0-100% of its maximum overload rating within 200 ms. This includes positive and negative real and reactive power.

**d. Ride-through and Synchronization Capabilities**

The ESS shall have the ability to remain online and functional during severe disturbances. The ESS shall not lose synchronism or trip offline for disturbances that the ESS is intended to mitigate. This includes the requirement to ride through rapid rate of change of frequency events and to ride through zero or near zero voltage events with recovery as the voltage recovers. All limitations related to the ride-through and synchronism capabilities of the ESS shall be stated. The ESS must continue to conduct, and not cease to conduct for any reason when the system is operating within the ride-through settings.

Commented [JGS6]: Added sentence from EPS to clarify previous sentence

Preliminary frequency and control requirements are illustrated in Table 1 below. The provided ride-through requirements are preliminary in nature. The ESS voltage and frequency trip settings should have configurable settings. If ESS is capable of riding through system disturbances beyond the limits specified in the voltage and frequency ride-through requirements, please provide an explanation of the ride-through capabilities of the ESS.

Table 1 – Voltage and Frequency Ride-through Settings

Commented [JGS7]: Changed figure to table per EPS comments

	Settings at Point of Interconnection (34.5 kV) (V is magnitude in per unit) (F is frequency in Hz) (T is time in seconds)	
	Setpoint	Trip Time
Under-voltage	$V < 0.88$	$T > 2.00$
Normal voltage	$0.88 < V < 1.10$	no trip allowed
Over-voltage	$1.10 < V < 1.20$	$T > 2.00$
Over-voltage	$1.20 < V$	$T > 0.16$
Under-frequency	$F < 57.0$	$T > 0.16$
Normal frequency	$57.0 < F < 63.0$	no trip allowed
Over-frequency	$63.0 < F$	$T > 0.16$

**e. Control Functions**

It is important for Bidders to describe and illustrate the control modes and methods of operation proposed. The flexibility of the ESS controls shall also be discussed and provide indication of the ease of control system changes such as adding new control modes and methods of operation.

**f. SCADA/EMS/SA/AGC Communications Protocol**

The ESS shall have the capability to interface with GPA's SCADA, EMS, Substation Automation (SA) and AGC systems over the latest stable release of serial and IP based DNP 3-Secure Authentication communications protocol.

GPA requires the project control system to report each inverter failure or cessation to the GPA SCADA system. The controller will report any alarm that can lead to a system or individual converter cessation or tripping to the GPA SCADA system. The controller will report all delivered power to GPA from the PV system, curtailed power from the PV system, ESS charging power, ESS power, (real and reactive) delivered to GPA, ESS state charge

Commented [JGS8]: Added paragraph from EPS comments

The technology proposed for the ESS will have at least 1 year of commercial operations history in a utility environment.

Bidder shall provide Bidder's guaranteed success rate according to the size of ESS in the Qualitative Scoring Workbook. The bidder shall also describe the method of calculating and monitoring the success rate in his/her technical proposal.

#### 2.2.3. Proven Technology

The proposed resource technology and key components must have a minimum of one (1) year of operating experience in commercial utility application. If the proposed technology is a "scale up" of an existing facility, the operational performance data for the smaller plant must be at least 1/10 the proposed plant size or larger.

#### 2.2.4. Use of GPA Facilities

GPA has secured six sites for Solar PV development from the U.S. Department of Navy which shall be the sites for proposed renewable resource projects. The sites are listed in Table 2 below.

Table 2 - GPA-Navy Leased Sites

No	Site Reference	Location	Acres	Est. MW
1	PV (Existing 250 KW PV Site)	Naval Base Guam	31	8
2	CDF		21	5
3	WWTP (Waste Water Treatment Plant)		16	4
4	Commissary		25	6
5	S. Finegayan	Rt. 3	71	18
Total :			164	41

The draft legal descriptions and sketches which have been referenced in the GPA-Navy lease are provided in Volume III Appendix L. GPA intends to finalize these documents prior to contract award.

The use of other GPA sites or facilities (with the exception of interconnection facilities) will NOT be permitted in this IFB.

**2.2.5. Limits on Renewable Energy Purchases**

Due to the nature of the generation control system and related response characteristics of the generators on the GPA system, GPA may limit the amount of energy delivered from renewable resources to no more than 30MW (AC) at the interconnection point.

Commented [JGS9]: Changed from "purchased"

The Bidder shall complete the Energy Projection table in the Technical Bid Form providing its estimated schedule of hourly deliveries of energy for a representative period of time period sufficient for GPA to understand the variability of the expected renewable resource and the impact of total generation costs as part of the Priced Offer evaluations. These estimates must match the annual Minimum Energy Production guarantees discussed further in Section 2.3.

**2.3. Project Capacity & Production**

**2.3.1. Minimum and Maximum Project Capacity**

There is no minimum nameplate project capacity that a Bidder may offer, however the maximum export capacity shall be 30 MW. This may be the combination of several generation units at one site.

**2.3.2. Annual Minimum Guaranteed Production Quantity**

The Bidder will provide a guarantee for an Annual Minimum Quantity, in MWh, to be delivered to GPA's system. Subsequent failure to provide this guaranteed Annual Minimum Quantity will subject the Bidder to penalties as described in Renewable Energy Purchase Agreement. The Bidder will also provide the expected minimum (also in MWh) to be delivered each year of the contract period, at a 95% confidence level.



**2.4. Delivery**

**2.4.1. Interconnection**

The Bidder will deliver renewable energy to a GPA-determined interconnection point on GPA's 34.5 kV transmission system. GPA will determine the exact location after completion of a detailed interconnection study. The GPA transmission system and primary delivery points are identified in the attached map (See Appendix G). We request that the Bidders identify potential interconnection sites within their submittal.

GPA is recommending the following interconnection requirements. Note final interconnection agreement will be based on System Impact Study recommendations.

1. An underground loop system in and out of a new substation at the renewable generation facility at transmission level (34.5kV and up) connecting to an existing GPA transmission line. The rerouted transmission line, its associated breakers, and control and protection devices, etc. may require upgrade.
2. An underground transmission line connecting directly to the nearest GPA substation at transmission level (34.5kV and up) from a new substation at the renewable generation facility. The connected GPA substation will require upgrades including a new breaker, control and protection devices, and additional bus structure, etc.
3. A Fiber optic communication line between the renewable generation facility and the connected GPA substations.
4. A communication assisted protection scheme with primary and backup protection devices via a dedicated fiber optic line for the transmission line protection between the renewable generation facility and the connected GPA substations. Current differential protection is recommended.
5. GPA will need to set limits for the high/low voltage ride through, hi/low frequency ride through, VAR/power factor support and ramping rate limits based to various system studies done by our consultants and our existing system condition.

The cost of facilities to bring the Bidder's energy to GPA's point of interconnection is the responsibility of the Bidder. Bidders shall be responsible for the design, engineering and construction cost as well as construction and commissioning. All design shall require GPA review and approval and construction shall be coordinated with GPA for inspections during construction.

Bidders must include the cost for interconnection in their priced proposals as this may be negotiated with GPA during contract negotiations. Total costs, however, must still fall below GPA's avoided cost: the marginal cost for fuel as approved by the CCU and PUC.

The cost estimates in the table below are for evaluation purposes:

Transmission Cost Per Mile	
Overhead (Poles, Hardware, #927 Al Primary Lines)	\$1.24 M
Underground (Manholes, Conduits, and 1000 kcmil Al. Primary Lines)	\$2.20 M

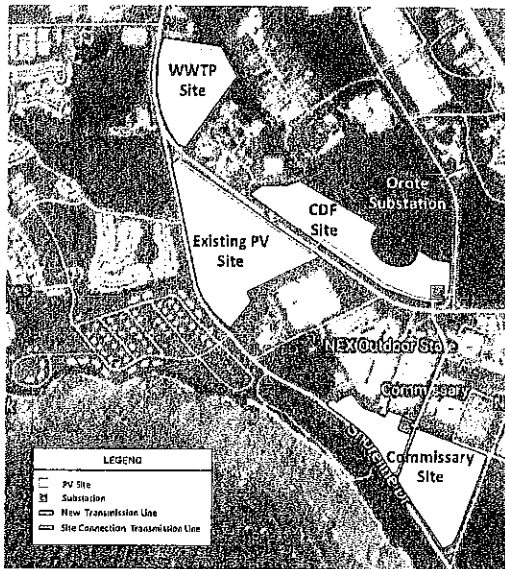
Bidder shall provide bidder's methodology of how to measure the power and energy output at the point of interconnection including output of renewable generation plant. This is for GPA to inspect and verify bidder's energy storage system performance.

**2.4.1.1 Site Interconnection Discussions**

Final interconnection requirements will be based on a completed System Study for selected proposed projects. As an initial evaluation of the sites, GPA has evaluated the potential interconnection options for sites located on Naval Base Guam, Piti and on Route 3, Dededo.

The Naval Base Guam sites include the Commissary Site, Waste Water Treatment Site, Existing PV Site, and CDF site

GPA proposes all sites to be combined to a new central substation located on the CDF site as shown in Figure 2. This will be the meter point(s). One of the existing transmission lines should be intercepted and routed via the new CDF site. Thus, there will be two connection points at the CDF site. The CDF substation shall be designed using a sectionalized bus scheme.



**Figure 2 – Naval Base Guam Sites Interconnection**

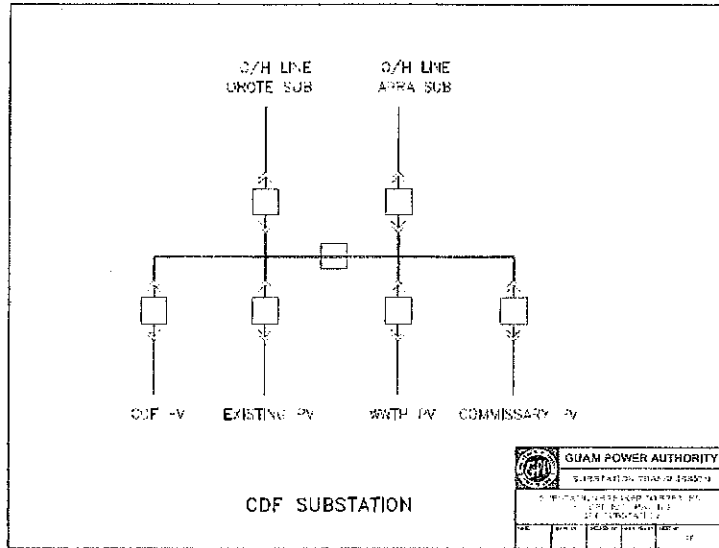


Figure 3 – Naval Base Guam New Substation

The South Finegayan Site would be considered a single project site. An existing 34.5kV overhead line runs adjacent to the property along Route 3. The Harmon Substation is the closest substation however Navy intends to build a new substation along Route 3. In addition, there is a plan to build a new underground transmission line along the existing transmission path.

Due to the construction timeline for the new North Finegayan substation, GPA proposes that a substation be built on PV site and intercept the existing overhead transmission line. The new solar substation shall utilize a sectionalized bus scheme to allow for isolating the solar site while maintaining service to Harmon and Andersen substations. Site would require a future project to transition to the new underground system once completed.

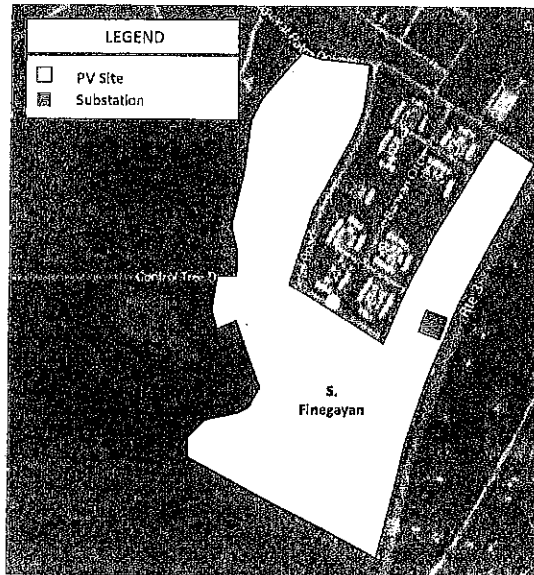


Figure 4 – South Finegayan Site Interconnection

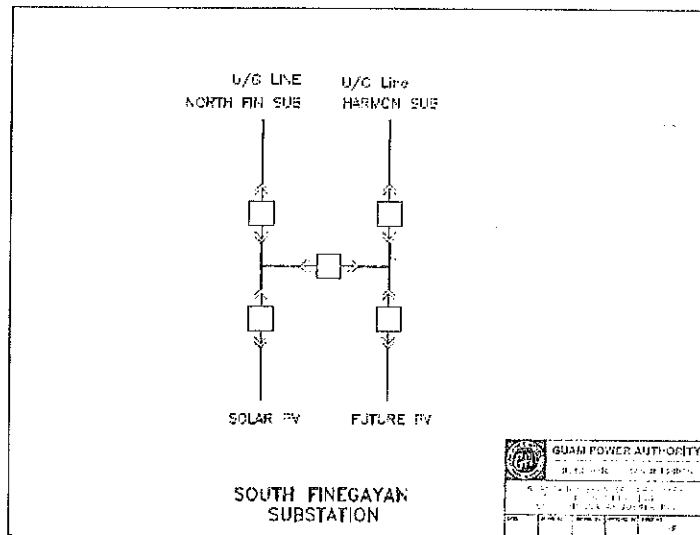


Figure 5 – South Finegayan Site Interconnection

2.4.2. GPA Interconnection Standard Specifications

GPA maintains standard specifications for interconnection equipment and communication protocols.

2.4.2.1 Transmission Line

Interconnection shall be to the 34.5 KV transmission. The following are specifications for 34.5 KV transmission lines:

Item	Specification
Overhead Lines	927 kcmil AAAC bare aluminum conductor.
Underground Lines	2 sets 1000 kcmil 133% aluminum XLPE underground cable with T-splice modular cable connectors.

In addition, Bidders are to provide 15% spare underground cable 1000 kcmil and associated modular T-splice cable connectors as GPA non-stock item materials.

**2.4.2.2 Substation Hardware**

The following are specifications for 34.5 kV breaker, switchgear, relays, instruments and controls, P & CT, instrument and cable.

Item	Specification
34.5 kV Breakers	Outdoor: SF6 breakers.
	Indoor: Matching existing GPA breakers.
Relays	SEL relays and meters.
PT	Dual ratio
CT	Class 400, multi-ratio.
Cable	#10 AWG for CT connection, #12 AWG for control and power, #18 AWG for SCADA communication

**2.4.2.3 Substation Buildings**

All new substations shall be concrete structure which meet Guam building codes.

**2.4.2.3 Communication Protocol**

Standard Communication Protocol with the existing and future SCADA/EMS is DNP3/DNPi. DNP3-SA version 5 serial and over TCP/IP or latest stable release implemented in concordance with the technical bulletins from www.dnp.org.

**2.4.3. Substation Short Circuit Capacity Values**

The following are the existing short circuit currents (base and maximum) for Orote and Harmon Substations .

Substation	Base Generation				Max Generation			
	3Ph Fault		LG Fault		3Ph Fault		LG Fault	
	SC MVA	X/R Ratio	SC MVA	X/R Ratio	SC MVA	X/R Ratio	SC MVA	X/R Ratio
Orote	470.7	7.70494	460.3	8.3632	568.6	6.38708	514.7	7.42385
Harmon	681.5	11.1796	868.7	9.44163	934.4	9.58519	1130.9	8.03686

**2.4.4. System Integration Study**

At the completion of the Priced Proposals evaluation and subject to the size and location of a Bidder(s) project, GPA will undertake a "System Integration Study". The purpose of this study is to determine the system impacts and upgrade requirements for integration of the selected project or projects into the GPA system. The Bidder or Bidder(s), in the event GPA selects more than one bid, will be responsible for the cost of such study. Presently the estimated cost for a single project evaluation is about \$83,000. If

additional modeling is required for evaluating multiple projects concurrently, additional costs may be imposed per model.

The Bidder(s) will be responsible for the costs of system upgrades, if any. If required, a separate System Integration Cost Agreement will be executed by the parties. Selected Bidders will have the opportunity to withdraw their bids upon review integration costs resulting from the GPA study.

Upon request the selected bidders will provide following information for the study:

1. Size and scope of the various types of renewable projects. This should also include any additional details that may be known about individual proposed projects, including the electrical model for the proposed interconnection, such as the distribution line description and impedances at the point of the interconnection.
2. Solar irradiance data in 2-second intervals for each solar project – time synchronized if possible.
3. Expected control characteristics of the projects – It will be critical that each project must be capable of being controlled in real time. Voltage control characteristics and frequency characteristics must be provided.
4. The developer must supply PSLF modeling information, and EMT modeling information (such as in EMTP-RV or PSCAD format) to allow for further detailed study work for the project itself, and for use on an ongoing basis for GPA system studies for other purposes. Modeling data should also include relevant modeling data for collector system/transformers between the inverter terminals and the Point of Interconnection.

Commented [JGS10]: Added new bullet per EPS comments

## 2.5. Pricing

### 2.5.1. Fixed Pricing for Guaranteed Energy

Bidders are required to submit fixed pricing for the guaranteed renewable energy delivered for the entire contract period.

### 2.5.2. Pricing for Energy Above Guaranteed Amount

All renewable energy available from the Bidder's project(s) above and beyond the guaranteed amount will be offered to GPA at the lesser of the two following prices: 1) the Bidder's guaranteed price applicable to the then current time period or 2) the effective Levelized Energy Adjustment Clause (LEAC) fuel recovery cost incurred by GPA's ratepayers. The LEAC fuel recovery cost is recalculated approximately every six months and is approved by the Guam Public Utilities Commission.

Data on the current LEAC fuel recovery costs can be found on GPA's website at:  
[http://www.guampowerauthority.com/gpa\\_authority/rates/gpa\\_rate\\_schedules.php](http://www.guampowerauthority.com/gpa_authority/rates/gpa_rate_schedules.php)

Details about historical filings and LEAC fuel recovery charges can be found on the PUC's website at:  
<http://www.guampuc.com/main/?pg=docs&category=Guam%20Power%20Authority&subcat=LEAC>

Details of the calculation of the LEAC can be found under GPA's Rate Schedule "Z" at:

**Renewable Energy Resource Phase III**

[http://www.guampowerauthority.com/gpa\\_authority/rates/documents/ScheduleZ-61kb.pdf](http://www.guampowerauthority.com/gpa_authority/rates/documents/ScheduleZ-61kb.pdf)

For the evaluation, GPA shall use the most recent LEAC Rate approved by the PUC. An amendment shall be forwarded to all prospective bidders for the final rate.

**2.5.3. Energy Purchase Price Units**

The Bidder shall provide a fixed price bid in \$/MWH for the term of the proposed delivery of renewable energy for each ESS proposal options. The price bid shall include the capital and O&M components which shall be referred to should GPA exercise the capital buy-out option. All columns in the bid price worksheet must be filled. GPA will not accept bids with year-over-year (YOY) escalation rates greater than 1.0% per year.

**2.5.4. Bid Expiration**

All Bid terms, conditions, and pricing are binding for 8 months following the due date of the IFB.

**2.6. Renewable Energy Credits and Environmental Credits:**

GPA retains all environmental attributes associated with the winning Bidder's energy, including but not limited to renewable energy credits, greenhouse gas, green tags, or carbon credits, and any other emissions attributes, all as set forth in the form of Renewable Energy Purchase Agreement.



### 3. TECHNICAL INFORMATION

This section discusses the technical information required for the qualification process in Step One of this multi-step bid. Bidders are required to answer all questions raised in the Qualitative Scoring Workbook for Part I - Qualitative Scoring References and Part 2 -- Technical Data provided with the bid documents.

#### 3.1. Project Development

This category scores the likelihood that a Bidder's renewable resource project will be placed in commercial service. The evaluation criteria for this category generally address construction and development risks associated with the completion of projects that are not yet in commercial operation, and which are necessary to support bids. Plants that are already operating or are sufficiently advanced in construction may be deemed to earn the maximum possible score from this category. GPA requires bids for projects that will achieve commercial operation within 36 months after contract award.

For projects that are less advanced in construction, we will consider the following criteria for scoring:

1. Method and status of project financing
2. Level of site control by developer (full ownership, long-term lease, short-term least, negotiating a site, searching for a site, or non-of-the above).
3. Project management/experience
4. Status of required permits, licenses and studies
5. Status of equipment supply and EPC agreements

#### 3.2. Status of Project Financing

Bidders are required to provide responses to all questions below to demonstrate the financial viability of their project.

1. Identification of equity participants.
  - a. Who are the equity participants in the project?
2. Evidence that the project will be financed.
  - a. How will the project be financed?
  - b. Is there a written commitment from the equity participants? If so, please provide a copy with confidential information redacted if necessary.
  - c. Discuss and/or provide supporting information on any project financing guarantees.
  - d. Does the developer envision any conditions precedent to project financing other than execution of the power purchase agreement and Guam Public Utilities Commission approval of the power purchase agreement? If so, what do you expect them to be?
3. Description of the Bidder's organizational structure from a financial and legal perspective, including any general and limited partners, involvement of subsidiaries, providers of capital, and percentage interest of each party.
4. Provide a description of the financing plan for the project, including construction and term financing. The financing plan should address information contained in the pro forma, such as:
  - a. The project's projected financial structure;
  - b. Expected sources of debt and equity financing;
  - c. Estimated capital cost.
  - d. Evidence the project is financeable

In addition, the financing plan should address the financing of development costs. All bidders are required to provide this information.

5. Provide documentation illustrating the experience of the project sponsor in securing financing for projects of similar size and technology. For each project provide the following information:
  - Project name and location
  - Project type and size
    - a. Date of construction and permanent financing
6. Provide evidence that the Bidder has the financial resources and financial strength to complete and operate the project as planned.
7. Provide copies of the most recent audited financial statement for each Bidder, its parent or subsidiary company to be used in this contract. Also, list the current credit rating from Standard & Poor's and Moody's for the sponsor, affiliates, partners, and credit support provider. Unaudited financials certified by the company's chief financial officer and any Dun & Bradstreet rating are acceptable.
8. The Bidder should demonstrate its ability (and/or the ability of its credit support provider) to provide the required security, including its plan for doing so (including type of security, sources of security and a description of its credit support provider).
9. Provide a description of any current credit issues regarding the Bidder or affiliate entities raised by rating agencies, banks, or accounting firms. Credit issues includes and loan defaults or legal suits or potential suits likely to materially affect the company's finances or ability to obtain loans or other instruments in the financial markets. Bidders should address how they intend complete project acknowledging
10. Describe the implication of the federal Production Tax Credits or Investment Tax Credits (or similar incentives) on the viability of the project.
11. Provide a memorandum with supporting information demonstrating that the bid will not be subject to Variable Interest Entity treatment<sup>1</sup> and that GPA will not have to carry this entity on its financial statements.
12. Pro forma income and cash flow statement conforming to Generally Accepted Accounting Principles for the project for the term of the proposed Power Purchase Agreement (include revenue and cost data by major categories, debt service, depreciation expenses and other relevant information). Bidders may propose to submit their financial pro forma to a mutually agreed upon independent third party rather than to GPA. Bidders should note that this information will be required of short-listed bidders only and will be requested by GPA upon shortlist notification or after. Should GPA request pro forma financial information from the bidder, the information will only be used for project viability assessment only.
13. Bidders must disclose any litigation related to projects owned or managed by them or any of their affiliates in the United States.

### 3.2.1. Site Control

GPA provides the sites for this bid. GPA has entered into a lease with the Navy for use of specific properties for solar photovoltaic development. Bidders should provide GPA with some confidence in plant siting using these sites. Maps and property descriptions are provided in Volume III Appendix L. Unpriced Technical Offers shall address the following:

1. Map of the site(s), the total acreage, the interconnection point, and the relationship of the site to other local infrastructure. In addition to providing the required map, provide a site layout plan which illustrates the location of all equipment and facilities on the site.

<sup>1</sup> GPA is not willing to be subject to accounting treatment that results from variable interest entity ("VIE") treatment as set forth in Financial Accounting Standards Board Interpretation No. 46 (revised December 2003) ("FIN46R").

2. Identify any rights-of-way or easements that are required for access to the project or for interconnection. Describe the status of rights-of-way and easement acquisition, and describe the plan for securing the necessary rights-of-way, including the proposed timeline.
3. Describe whether the project has the capability for expansion at the proposed site. If so, describe the expansion capability possible.

### 3.2.2. Project Management/Experience

Bidders are required to demonstrate project experience and management capability to successfully develop and operate the project proposed. GPA is interested in a project team which has demonstrated success in projects of similar type, size and technology and can demonstrate an ability to effectively work together to bring the project to commercial operation in a timely fashion. GPA requests the following information:

1. An organizational chart for the project that lists the project participants and identifies the management structure and responsibilities.
2. Statements that list the specific experience of the firm in developing, financing, owning, and operating generating facilities, other projects of similar type, size and technology, and any evidence that the project participants have worked jointly on other projects for each of the project participants (including the Bidder, partners, and proposed contractors). (If a bidder is relying on the experience of a consultant or contractor to meet the Experience Threshold Requirement, the bidder should describe any contractual relationships between the bidder and the consultant or contractor.)
3. A management chart which lists the key personnel dedicated to this project and provides biographies of the key personnel.
4. Listing of all projects the project sponsor has successfully developed or that are currently under construction. The following information shall be included for each project:
  - a. Name of the project
  - b. Location of the project
  - c. Project type, size and technology
  - d. Commercial operation date
  - e. Capacity factor of the unit for the past three years
  - f. Availability factor of the unit for the past three years
  - g. References, including the names and current addresses and telephone numbers of individuals to contact for each reference.
5. With regard to the Seller's project team, identify and describe the entity responsible for the following:
  - a. Construction Period Lender
  - b. Operating Period Lender
  - c. Financial Advisor
  - d. Environmental Consultant
  - e. Owner's Engineer
  - f. Construction Contractor
  - g. Transmission Consultant
  - h. Legal Counsel

### 3.2.3. Project Schedule and Commercial Operation Date

Bidders are required to provide a complete critical path schedule for the project from the notice of selection of the project for contract negotiation to the start of commercial operations. For each project

element, list the start and end date. Bidders should ensure that the schedule provided in this section is not inconsistent with the milestone events contained in the Purchase Power Agreement.

Identify the elements on the critical path. The schedule should include, as a minimum, facility contracts, construction, siting, environmental permitting (anticipated submittal and approval), fuel supply, financing, engineering, procurement, local permits and any other requirements that could influence the project schedule, and the Commercial Operation Date. Bidders shall identify any status of permits, licenses and studies required. The project schedule should include dates for all construction and applicable reporting milestone events specified in the Purchase Power Agreement.

#### 3.2.4. Engineering and Technology (Status of equipment supply and EPC agreements)

Bidders should provide information about the specific technology or equipment including the track record of the technology and equipment. The following information is required for these evaluation criteria:

1. A reasonable but preliminary engineering plan which includes the following information:
  - a. Name of principal engineering firm responsible for facility design
  - b. Type of generation technology
  - c. Major equipment considered or expected to be used
  - d. Equipment vendors selected/considered
  - e. History of equipment operations
  - f. Equipment procurement strategy
2. Identification of expected key equipment suppliers and information that illustrates and discusses the proposed equipment and technology, lead times for delivery to GPA, and suppliers prior experience with equipment operation in tropical island environments. This should specifically address the ability of the equipment to operate in low short-circuit conditions and extreme voltage and frequency requirements.
3. Identification of similar equipment by the same manufacturer that are presently in commercial operations including the number installed, installed capacity and estimated generation.
4. Evidence that the technology to be employed for energy production is ready for transfer to the design and construction phases.
  - a. Describe the technology to be employed for energy production.
  - b. To the developer's best knowledge, are there, or have there been any similar plants in commercial operation? If not, i) are there, or have there been, any pilot projects, and ii) please provide evidence that the technology to be employed for energy production has been proven. Such evidence may include copies of studies confirming technical feasibility.
5. Indication if the Bidder has secured its equipment for the project. If not, identify the long-lead equipment options and describe the timing for securing equipment.
6. Bidders are encouraged to provide any additional information that will further describe the proposed projects technical feasibility and applicability to development on Guam.

Commented [JGS11]: Added per EPS comments

### 3.3. Physical Project Characteristics

This category captures the physical characteristic risks of the bid products. The evaluation criteria for this category generally address physical and operational risks associated with the production and delivery of power to GPA. Bidders are required to complete **Part 2 – Technical Data** in the Qualitative Scoring Workbook file (excluding any price references). The characteristics that will be considered in scoring are:

#### 3.3.1. Operating Profile

The evaluation of operating profile shall be based on the following:

1. Conformance with Performance Standards
2. Impacts on System Operations/Stability
3. Generation Profile (see Renewable Energy Project Generation Profile data table in Part – 2 Technical Data worksheet in the Qualitative Scoring workbook)
4. Quality of Forecasting and Dispatchability
5. O&M Plan and Coordination of Maintenance- GPA is interested in projects that can demonstrate that the maintenance plan, level of funding, and mechanism for funding will ensure reliable operations during the term of the contract. Bidders shall:
  - a. Provide an operation and maintenance plan for the project that demonstrates the long term operational viability of the proposed project. The plan should include a discussion of the staffing levels proposed for the project, the expected role of the project sponsor or outside contractor, scheduling of major maintenance activity, maintenance funding levels, and the plan for testing equipment.
  - b. Indicate whether or not the project sponsor is willing to coordinate the maintenance schedule for the project with the annual maintenance schedule of GPA.
  - c. Describe the status of the project sponsor in securing any operation and maintenance agreements or contracts. Include a discussion of the sponsors plan for securing a long-term O&M contract.
  - d. Provide examples of the Bidder's experience with O&M services for other similar projects.

#### 3.3.2. Point of delivery

Bidders must discuss interconnection with GPA system. Information required to evaluate this criteria includes the following:

1. Preliminary Single-Line Diagram(s) for the generation and interconnection facilities (see Appendix H for Unpriced Technical Offer submittal requirement details)
2. A plan map of the facilities, indicating the interconnection point to the GPA system.
3. Technical specifications and other information available for the generators included in the bid.

#### 3.3.3. Risk

All bidders must submit a 1-2 page Risk-Assessment Plan which addresses the following items:

1. Identify project risks. (Include issues that may impact project schedule, budget, output or performance).
2. Explanation of how the risks will be avoided / minimized.
3. Propose any options that could increase the value of the project.
4. Explain the benefits of the proposed options.

#### 3.4. Power Product Characteristics

This category scores how well the bid product matches GPA's operational needs. The evaluation criteria for this category generally address performance and supply portfolio concentration risks, along with the benefits of flexibility and optionality. The characteristics that will be considered in scoring are:

1. Guaranteed Annual Minimum Energy Production (MWH)
2. Dispatchability. This bid requires ESS for the purpose of shifting energy to a period other than when the energy is produced. Proposals with no ESS or not capable of shifting its energy to another period (i.e. during evening hours) shall be disqualified.
3. Describe unit electrical control features available such as automatic generator control, VAR control, droop control, set-point control, emergency assist capability or such other control related features.
4. Flexibility
  - a. In-service date (GPA prefers projects that reasonably propose a commercial operation within 36 months after contract award)
  - b. Willingness to accept contract provisions for flexibility to accommodate future changes to performance standards; and
  - c. Bid size
5. Contract Term.

Commented [JGS12]: Added per EPS comments

### 3.5. Credit Evaluation

GPA will evaluate the creditworthiness of the Bidder. Bidders shall discuss the following that will be considered in this evaluation criteria scoring:

1. Debt and equity ratings
2. Performance assurance
3. Financial ratio analysis
4. Default risk
5. Credit concentration and liquidity effect
6. Enforceability of contractual credit terms
7. Bidder revisions to contract templates that may affect credit requirements

### 3.6. Environmental Permits and Impacts

The Bidder should identify environmental impacts associated with the proposed project and its plan to mitigate such impacts. Included in this section are technical environmental issues associated with air, water, solid waste, land use, noise, and other environmental issues. The following addresses specific environmental permitting considerations.

#### 3.6.1. Permits

Bidders shall identify all permits, licenses, and environmental assessments and/or environmental impact statements required. Specifically, the Unpriced Technical Offer should discuss the following:

1. All Federal and GUAM permits, licenses, and environmental assessments and/or environmental impact statements required to construct and operate the project and governmental agencies for issuing permits and licenses.
2. Experience with governmental agencies which will issue or approve the required permits, licenses, and environmental assessments and/or environmental impact statements. Prepare timeline to complete acquisition of permits, licenses, and environmental assessments and/or environmental impact statements.

3. Provide the anticipated timeline for seeking and receiving the required permits, licenses, and environmental assessments and/or environmental impact statements, using the execution date of the power purchase agreement as the starting point. Please include a narrative on the basis for the assumed timeline.

3.6.2. Site Environmental Assessment

Commented [JG513]: Will need to address glint and glare requirements in an amendment (refer to Navy EA document)

This bid document contains an Environmental Assessment of the proposed sites in Appendix P. Note that the Harmon Annex, Harmon Booster, and the Tumor Tank Farm sites included in the study are not available for use or lease in this bid. Bidders shall also note the environmental restrictions in the drafted sublease provided in Volume III.

Bidders shall address each of the major environmental areas and sub-areas as presented below;

1. Site development
2. Air quality
3. Water resources
4. Ecology
5. Land use
6. Cultural resources
7. Previous site use
8. Noise level
9. Aesthetic/visual

In addition to the above, GPA requests for the following:

10. The location of the nearest residence and the nature of any buildings within 500 feet of the site.
11. Documentation identifying any potential environmental impediments to project development and the plan to mitigate the impediment

#### 4. CONTRACT

GPA has created a draft of the Renewable Energy Purchase Agreement in Volume III of this IFB. This document includes the Interconnection Agreement and the Sublease Agreement for use of proposed properties. Bidders are required to review the document and provide comments, note any exceptions, and provide recommendations during the proposal development period as a basis for discussions during contract negotiations. This process is also a factor in the Qualitative evaluation in this multi-step bid.

The final, executable Renewable Energy Purchase Agreement shall be negotiated in good faith between the parties. Each Respondent is responsible for acquiring and/or verifying that it is in compliance with all licenses, permits, certifications, studies, reporting requirements and approvals required by federal, and Guam government laws, regulations and policies in order for it to contract for and perform in accordance with its bid.

The following highlights the contract document between GPA and the selected Bidder(s) or in this section referred to as CONTRACTOR(S).

##### 4.1. CONTRACTOR'S Responsibilities

This section highlights the CONTRACTOR'S responsibilities.

##### 4.1.1. System Impact Study

The CONTRACTOR is responsible for the costs of the system impact study.

##### 4.1.2. System Upgrades for Interconnection

The CONTRACTOR is responsible for the all system impact costs, including new or upgraded facilities that are required for the project interconnection with the GPA system.

##### 4.1.3. Interconnection Agreement

The CONTRACTOR shall complete and adhere to interconnection agreement.

##### 4.1.4. Development Security and Post Development Security

The CONTRACTOR is required to post Credit Support only in the form of a Letter of Credit or cash referred to as "Development Security", to secure the CONTRACTOR'S obligations prior to Commercial Operation of the Facility. The CONTRACTOR will forfeit this security if failed to meet project milestones, claims force majeure, or other conditions identified in the draft contract provided in Volume III.

Upon commissioning of the new facility, the Development Security will be returned to the CONTRACTOR and the CONTRACTOR will be required to submit a Post Development Security as security for Seller's obligations following the Commercial Operation Date.

##### 4.1.5. Performance Guarantees

The CONTRACTOR is required to meet Annual Minimum Quantities for energy delivered



**4.1.6. Project Milestones**

The CONTRACTOR shall submit a construction and commissioning schedule for the proposed project. The CONTRACTOR shall meet deadline for commissioning or is subject to penalties as described in the purchase power agreement.

**4.1.7. Government Charges**

The CONTRACTOR is responsible for all government taxes, fines or fees necessary for operation of proposed facility.

**4.2. GPA Responsibilities**

**4.2.1. Renewable Energy Purchase**

GPA shall purchase all renewable energy produced by the CONTRACTOR.

**4.2.2. Transmission**

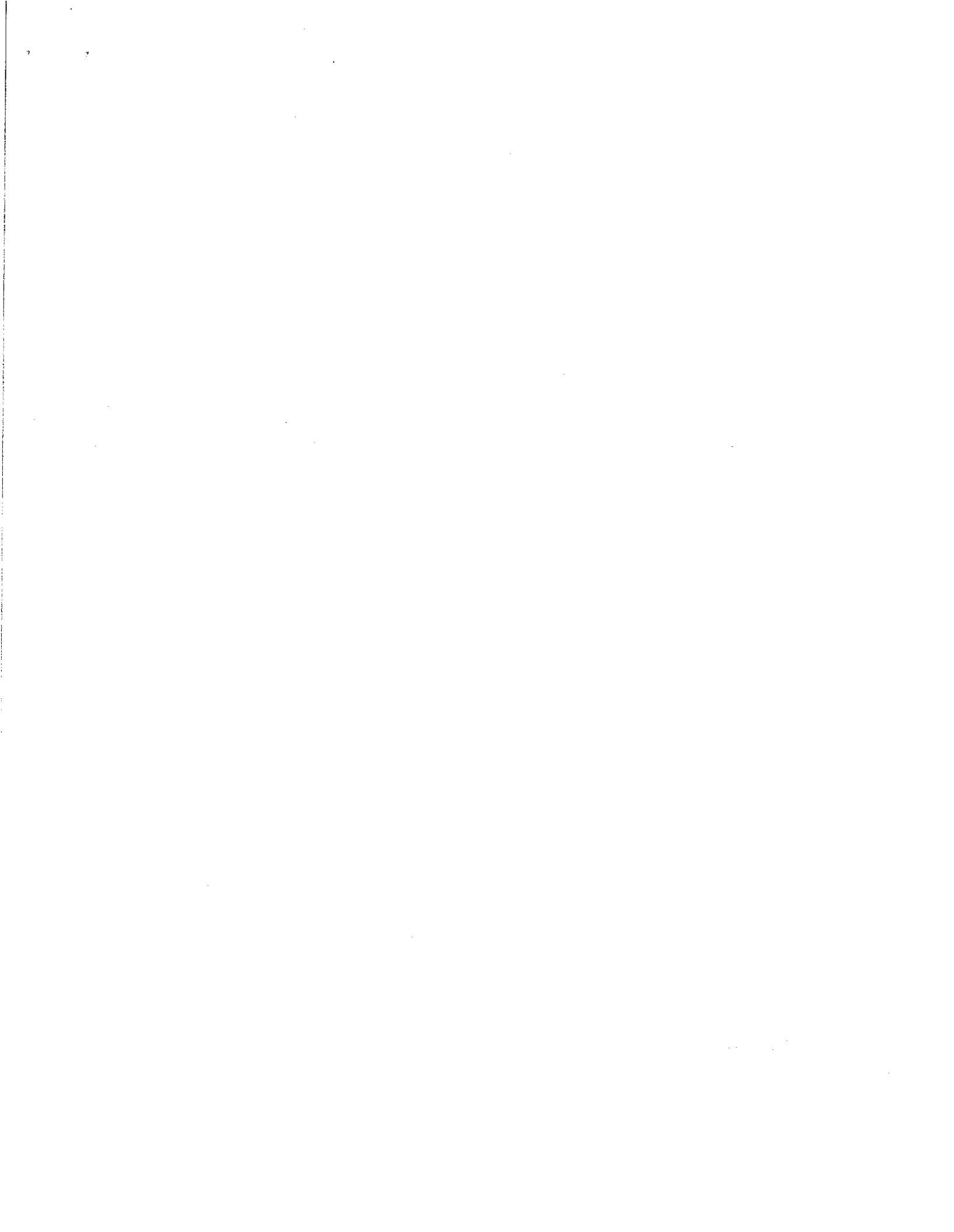
GPA is responsible for the maintenance and associated maintenance costs of all equipment and transmission lines after the CONTRACTOR delivery point.

**5. PENALTIES / DAMAGE FEES**

Contract performance will be evaluated annually, within 60 days of the contract anniversary, for any penalty evaluations for the pre-commissioning period and the post-commissioning period. Volume III discusses Development Security (Section 4.2), Production Default (Section 4.8), and Ramp Performance Penalty (Section 4.19)

**6. REGULATORY APPROVAL**

Any final negotiated term sheet or contract will be conditioned upon actions and/or approvals by Guam Public Utility Commission, satisfactory to GPA in its sole discretion.



**From:** David Burlingame <[dburlingame@epsinc.com](mailto:dburlingame@epsinc.com)>

**Sent:** Friday, December 21, 2018 10:21 AM

**To:** Jennifer G Sablan

**Cc:** John J Cruz, Jr.; Francis J Iriarte; Jim Cote

**Subject:** Re: Phase III Question #2.3 Glidepath

Ok, you are good to go with the 1.0-2.0 Hz. Old man memory issues.

These batteries are far down the line for frequency response and should only be used if the ESS for the other 4 ESS's on-line at the Phase II plants and the GPA ESS's fail to arrest the decay. Those ESS systems have a much tighter frequency deadband allowance than the Phase III ESS.

David Burlingame, P.E.

Principal

Office (907) 646-5103

On Thu, Dec 20, 2018 at 3:06 PM Jennifer G Sablan <[jsablan@gpagwa.com](mailto:jsablan@gpagwa.com)> wrote:

Yes, this is for the renewable bid which requires energy shifting. We had some delays on this as we needed to confirm Navy's requirements for interconnection in order to waive lease fee payments and to update the Master Lease. It took several months.

EPS document was emailed to us in December 2017 (12/14/17)

Regards,

jenn

**From:** David Burlingame <[dburlingame@epsinc.com](mailto:dburlingame@epsinc.com)>

**Sent:** Friday, December 21, 2018 10:02 AM

**To:** Jennifer G Sablan <[jsablan@gpagwa.com](mailto:jsablan@gpagwa.com)>

**Cc:** John J Cruz, Jr. <[jcruz@gpagwa.com](mailto:jcruz@gpagwa.com)>; Francis J Iriarte <[firiarte@gpagwa.com](mailto:firiarte@gpagwa.com)>; Jim Cote <[jcote@epsinc.com](mailto:jcote@epsinc.com)>

**Subject:** Re: Phase III Question #2.3 Glidepath

yes, let me review it. this is for the ESS proposed as part of the load shifting PV?

David Burlingame, P.E.

Principal

Office (907) 646-5103

On Thu, Dec 20, 2018 at 3:00 PM Jennifer G Sablan <[jsablan@gpagwa.com](mailto:jsablan@gpagwa.com)> wrote:

Dave,

This is from the Phase III technical amendment EPS provided last year. Do you want to review the document again to make sure we are still on the same page? The only edit I had was that we removed

the last sentence in Section 3.2 and inserted the language requiring ESS inverters to be black start capable for islanding as was the condition with Navy as part of the lease fee waiver.

Regards and Happy Holidays!

Jenn

**From:** David Burlingame <[dburlingame@epsinc.com](mailto:dburlingame@epsinc.com)>  
**Sent:** Friday, December 21, 2018 9:21 AM  
**To:** Jennifer G Sablan <[jsablan@gpagwa.com](mailto:jsablan@gpagwa.com)>  
**Cc:** John J Cruz, Jr. <[jjcruz@gpagwa.com](mailto:jjcruz@gpagwa.com)>; Francis J Iriarte <[firiarte@gpagwa.com](mailto:firiarte@gpagwa.com)>; Jim Cote <[jcote@epsinc.com](mailto:jcote@epsinc.com)>  
**Subject:** Re: Phase III Question #2.3 Glidepath

If the frequency deadband is 1.0-2.0 Hz, with a 1% droop, the ESS will not be at full power until the frequency reaches 58.4 Hz. This will not coordinate with the GPA underfrequency system. Since the ESS is on droop control, its not like it's on isoch control, where it exerts a large amount of energy regulating frequency. If it does not start contributing to frequency regulation until the Hz reaches 59.0 Hz, the GPA system will shed load and greatly reduce the benefit and use of the transient support of the ESS.

Can you explain the reason for the 1.0 -2.0 Hz deadband?

David Burlingame, P.E.  
Principal  
Office (907) 646-5103

On Thu, Dec 20, 2018 at 1:56 PM Jennifer G Sablan <[jsablan@gpagwa.com](mailto:jsablan@gpagwa.com)> wrote:

The technical amendment going out includes the following. The full version is attached.:

## **3.11 Control Modes**

The expected normal control mode for the ESS is described below. It is important for Bidders to describe and illustrate the controls proposed. The flexibility of the ESS controls shall be discussed and ability to change the control system shall be described.

### **3.11.1 Droop Control Mode**

**Droop control mode shall be provided and is the expected normal mode.** The ESS shall provide emergency system support when frequency drops below a settable deadband on a defined droop line. The deadband for the droop control will be user configurable from 1.0-2.0 Hz in 0.1 Hz steps.

### **3.11.2 Basic Functionality**

The droop control mode is the normal operating mode while the ESS is synchronously connected with the GPA grid. During normal operation, the system frequency is near 60 Hz and the real power output of the ESS is at its set-point. The set-point will be changed by GPA AGC.

Once the frequency deadband is exceeded, the droop line shall be made up of piecewise linear segments. Four segments shall be provided for each side of the frequency deviation spectrum (positive and negative). Each segment shall be defined by the frequency start and stop points and the droop value. During the design review phase, GPA and the Bidder will discuss the control logic and the method used to either reset the ESS schedule or return the ESS schedule back to the pre-event value. The bidder shall also provide a detailed description of the algorithm used to compute frequency for the controls, during both balanced and unbalanced system transients.

**From:** John J Cruz, Jr.

**Sent:** Thursday, December 20, 2018 4:35 PM

**To:** Jennifer G Sablan <[jsablan@gpagwa.com](mailto:jsablan@gpagwa.com)>; Francis J Iriarte <[firiarte@gpagwa.com](mailto:firiarte@gpagwa.com)>

**Cc:** David Burlingame [[dburlingame@epsinc.com](mailto:dburlingame@epsinc.com)] <[dburlingame@epsinc.com](mailto:dburlingame@epsinc.com)>

**Subject:** Phase III Question #2.3 Glidepath

Jenn,

Is droop capability in the IFB?

Question #2.3: §1 – The requirements of the ESS are too broad. The ESS should only be required to allow the project to meet its contracted generation, ramping, reactive power capabilities, and other essential grid compatibility requirements outlined in the IFB. Other functions should be contracted separately.

Regards,

John J. Cruz Jr., PE

CEA, CEM, MBA

AGMETS

ASSISTANT GENERAL MANAGER, ENGINEERING & TECHNICAL SERVICES

# Guam Power Authority

Examples of energy produced by 30 MW PV  
and size of storage

December 6, 2017







## ● ESS Sizing example:

- 30 MW max output of ESS, sized to discharge 120 MWh over a period of 4 hours (30 MW \* 4 hrs).
- Assuming 30 MW capable PV generation & Kepco generation profile. (No data available on expected generation profile from Phase III sites identified in IFB)
- Assuming round trip efficiency of ESS = 90% it would take 120 MWh/ 0.9 = 133 MWh to fully charge the ESS.
- Average April day (peak energy production month in terms of MWh/day) with a 30 MW PV field using Kepco data would mean 66 MWh of PV not able to be stored in the ESS every day in April.
- For all of April that would be 1,967 MWh that the ESS could not store

## ● ESS Sizing example:

- Average October day (min energy production month in terms of MWh/day) with a 30 MW PV field using Kepco data would mean 40 MWh of PV not able to be stored in the ESS every day in October.
- For all of October that would be 1,240 MWh that the ESS could not store
- For the year 14,810 MWh could not be displaced by the ESS



**From:** David Burlingame <[dburlingame@epsinc.com](mailto:dburlingame@epsinc.com)>  
**Sent:** Thursday, April 4, 2019 2:03 PM  
**To:** John J Cruz, Jr.  
**Subject:** Re: What do you think?

I think the issue is most likely a common DC bus where the inverters and the ESS share a common bus. That would be an acceptable arrangement in my opinion.

David Burlingame, P.E.  
Principal  
Office (907) 646-5103

On Wed, Apr 3, 2019 at 4:00 PM John J Cruz, Jr. <[jcruz@gpagwa.com](mailto:jcruz@gpagwa.com)> wrote:

### 3. Clarifications Requested to Supplement and Update to Volume III of the IFB:

3.1. Section 2: "GPA will not accept PV generation connected directly to the GPA 34.5 kV system" – GPA needs to provide more clarity as to the intended meaning of "PV generation connected directly" to the system. Depending on which interpretation of this phrase one uses, it is possible to include or exclude certain project architectures that bidders may be considering. Please provide examples of common configurations that are and are not acceptable (e.g. DC-coupled using dual-input inverter, DC-coupled with separate DC-DC converter & DC-AC inverter, AC-coupled with switching such that PV and ESS are not interconnected simultaneously, DC throwover switching, etc.).

GPA Response: There shall be no direct connection of PV inverters to the GPA grid. All PV energy received shall be delivered through the ESS as smooth and firm dispatchable output.

#### Should We Require:

- If the grid is off, the PV inverter must be able to provide power for charging the battery ESS.
- The BESS must be able to operate in isolated/islanded mode and provide power

Regards,

John J. Cruz Jr., PE  
CEA, CEM, MBA  
AGMETS  
ASSISTANT GENERAL MANAGER, ENGINEERING & TECHNICAL SERVICES

**From:** David Burlingame [mailto:[dburlingame@epsinc.com](mailto:dburlingame@epsinc.com)]  
**Sent:** Tuesday, April 30, 2019 9:54 AM  
**To:** John J Cruz, Jr. <[jcruz@gpagwa.com](mailto:jcruz@gpagwa.com)>  
**Subject:** Re: FW: Phase III pending questions

sorry - conduct 100% of rating - fumble fingers

David Burlingame, P.E.  
Principal  
Office (907) 646-5103

On Mon, Apr 29, 2019 at 3:53 PM John J Cruz, Jr. <[jcruz@gpagwa.com](mailto:jcruz@gpagwa.com)> wrote:  
At 10% of rating/

Current Rating? What rating? Why only 10%?

Regards,

John J. Cruz Jr., PE  
CEA, CEM, MBA  
AGMETS  
ASSISTANT GENERAL MANAGER, ENGINEERING & TECHNICAL SERVICES

**From:** David Burlingame [mailto:[dburlingame@epsinc.com](mailto:dburlingame@epsinc.com)]  
**Sent:** Tuesday, April 30, 2019 9:50 AM  
**To:** John J Cruz, Jr. <[jcruz@gpagwa.com](mailto:jcruz@gpagwa.com)>  
**Subject:** Re: FW: Phase III pending questions

correct - but more importantly - they can't just stay on-line and not trip, but not conduct at these low voltage levels. They must remain connected and conducting at 10%% of rating during these conditions

David Burlingame, P.E.  
Principal  
Office (907) 646-5103

On Mon, Apr 29, 2019 at 3:44 PM John J Cruz, Jr. <[jcruz@gpagwa.com](mailto:jcruz@gpagwa.com)> wrote:

Ok, I get that. The Voltage- Frequency Ride Through Requirements are below. And 10% is lower than 0.88. So even if the volrage plummets down to 10% or lower the inverters cannot trip until two seconds later.

	Settings at Point of Interconnection (V is magnitude in per unit) (F is frequency in Hz) (T is time in seconds)	
	Setpoint	Trip Time
Under-voltage	$V \leq 0.88$	$T \geq 2.00$
Normal voltage	$0.88 \leq V \leq 1.10$	no trip allowed
Over-voltage	$1.10 \leq V \leq 1.20$	$T \geq 2.00$
Over-voltage	$1.20 \leq V$	$T \geq 0.16$
Under-frequency	$F \leq 57.0$	$T \geq 0.16$
Normal frequency	$57.0 \leq F \leq 63.0$	no trip allowed
Over-frequency	$63.0 \leq F$	$T \geq 0.16$

Regards,

John J. Cruz Jr., PE  
 CEA, CEM, MBA  
 AGMETS  
 ASSISTANT GENERAL MANAGER, ENGINEERING & TECHNICAL SERVICES

**From:** David Burlingame [mailto:[dburlingame@epsinc.com](mailto:dburlingame@epsinc.com)]

**Sent:** Tuesday, April 30, 2019 9:35 AM

**To:** John J Cruz, Jr. <[jjcruz@gpagwa.com](mailto:jjcruz@gpagwa.com)>

**Subject:** Re: FW: Phase III pending questions

I would say that the xx% would be very low, 10% or less. What you are really trying to re-enforce is that the project must deliver maximum current during all voltage conditions and not just remain connected but not supporting the grid during the fault.

David Burlingame, P.E.  
 Principal  
 Office (907) 646-5103

On Mon, Apr 29, 2019 at 3:28 PM John J Cruz, Jr. <[jjcruz@gpagwa.com](mailto:jjcruz@gpagwa.com)> wrote:

with voltage collapse to below XX% during the fault condition

Is XX% = 85%

This is when the AC grid is de-energized

Regards,

John J. Cruz Jr., PE  
 CEA, CEM, MBA  
 AGMETS  
 ASSISTANT GENERAL MANAGER, ENGINEERING & TECHNICAL SERVICES

**From:** David Burlingame [mailto:[dburlingame@epsinc.com](mailto:dburlingame@epsinc.com)]  
**Sent:** Tuesday, April 30, 2019 3:25 AM  
**To:** John J Cruz, Jr. <[jcruz@gpagwa.com](mailto:jcruz@gpagwa.com)>  
**Subject:** Re: FW: Phase III pending questions

John, your answers cover it, I've added a few items of clarification below in red.

David Burlingame, P.E.  
Principal  
Office (907) 646-5103

On Sun, Apr 28, 2019 at 3:34 PM John J Cruz, Jr. <[jcruz@gpagwa.com](mailto:jcruz@gpagwa.com)> wrote:  
Dave,

Would you help me answer these?

In No.4, Instruction of GPA Amendment XIII:

The Bidders and their associated equipment providers must demonstrate the detailed performance and capability of their equipment under the extreme electrical conditions expected on Guam. This includes providing the technical limitations for the operation of the equipment for specific system conditions, as well as a description and demonstration of the various operating modes for the equipment.

JohnC Comments:

Is this requesting for equipment models? Or, Test Results?

The Bidder must indicate through written description and explanation of the provided models the exact response of the system to transient conditions experienced on the GPA system. The Bidder must demonstrate that the system can be operating in one of the steady-state operating modes and seamlessly transfer to grid support mode during a transient event and remain in grid support until GPA releases the system to its steady-state operation. This will require logic within the system that selects the controlling mode among several different modes being monitored and active within the system controller. This controlling mode may change during the transient condition.

The extreme electrical conditions include:

- Transmission Line Faults especially at the New Generation Power Plant with voltage collapse to below XX% during the fault condition and rising to over 1.10% after the fault clearing time.
- Generator Trips (45 MW post New Plant; 60 MW current) Resulting in frequencies down to 57.0 Hz prior to the new plant and absent the response of the inverter system, down to 57.0 hz in the new system.
- SCR = 2



In No.5, Instruction of GPA Amendment XIII:

No.	Title	Page / Sheet No.	Instruction of GPA Amd XIII	PEC Questions	GPA - reply
4	3. Technical Requirements for ESS and Inverters	162/948	The Bidders and their associated equipment providers must demonstrate the detailed performance and capability of their equipment under the extreme electrical conditions expected on Guam. This includes providing the technical limitations for the operation of the equipment for specific system conditions, as well as a description and demonstration of the various operating modes for the equipment.	<p>1) When will these documents need to be submitted to GPA? During technical bid submission or after the successful bidder has been selected?</p> <p>2) Can GPA provide an example of extreme electrical conditions?</p>	<p>1) Bidders should demonstrate the proposed project system issues in their technical proposals.</p> <p>2) Response forthcoming</p>

6	3.12 Real and Reactive Power Emergency Transient Response	162/948	During low voltage conditions, especially during faults, it may be more valuable to prioritize reactive power output for voltage support, than providing real power for frequency support, during the low voltage condition.	In chapter 3.12, the RFP states "emergency transient response". Does this mean voltage frequency ride through? Or does it mean grid support.	Response forthcoming
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During low voltage conditions, especially during faults, it may be more valuable to prioritize reactive power output for voltage support, than providing real power for frequency support, during the low voltage condition. The maximum duration fault is 5 cycles for primary and backup relaying and 12 cycles with breaker-fail relaying.

JohnC Comments:

The term "emergency transient response" should refer to:

- voltage frequency ride through as the system inverter should not trip during low voltage conditions and continue to conduct the maximum current of the inverter ; and,
- the inverter will provide grid support through greater supply of reactive power and real and reactive power following the fault clearing.

Regards,

John J. Cruz Jr., PE  
 CEA, CEM, MBA  
 AGMETS  
 ASSISTANT GENERAL MANAGER, ENGINEERING & TECHNICAL SERVICES

**From:** Jennifer G Sablan  
**Sent:** Monday, April 29, 2019 8:24 AM  
**To:** John J Cruz, Jr. <[jcruz@gpagwa.com](mailto:jcruz@gpagwa.com)>  
**Subject:** Phase III pending questions  
**Importance:** High

John,

6	3.12 Real and Reactive Power Emergency Transient Response	162/948	During low voltage conditions, especially during faults, it may be more valuable to prioritize reactive power output for voltage support, than providing real power for frequency support, during the low voltage condition.	In chapter 3.12, the RFP states "emergency transient response". Does this mean voltage frequency ride through? Or does it mean grid support.	Response forthcoming
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Jennifer G. Sablan

Manager, SPORD

GUAM POWER AUTHORITY

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Hagatna, Guam 96932-2977

Phone: (671) 648-3103

Email: [jsablan@gpagwa.com](mailto:jsablan@gpagwa.com)

**From:** John J Cruz, Jr.  
**Sent:** Friday, August 30, 2019 1:37 PM  
**To:** Jennifer G Sablan <[jsablan@gpagwa.com](mailto:jsablan@gpagwa.com)>  
**Subject:** KEPCO Hanwha DB Response

FYI

----- Forwarded message -----

**From:** "David Burlingame" <[dburlingame@epsinc.com](mailto:dburlingame@epsinc.com)>  
**Date:** Sat, Aug 24, 2019 at 3:12 AM +1000  
**Subject:** Re: KEPCO-Hanwha  
**To:** "John J Cruz, Jr." <[jcruz@gpagwa.com](mailto:jcruz@gpagwa.com)>

John, I have not heard from you, but thought I would touch base.

1. - Yes the intent of the specification is for the systems to be DC coupled. I am unsure if DC coupled systems have black-start capability. When we talked to Siemens energy during the development of the plant, they were installing a dc coupled system that supposedly had black start capability, however, I do not know if it was successful. If not, then Black-start could be eliminated with the knowledge that each micro-grid would need black start generation to fire the BES.

2. - My recommendation is that the metering point is A in both cases.

David Burlingame, P.E.  
Principal  
Office (907) 646-5103

Regards,

John J. Cruz Jr., PE  
CEA, CEM, MBA  
AGMETS  
ASSISTANT GENERAL MANAGER, ENGINEERING & TECHNICAL SERVICES

I need to submit final amendment for questions by Wednesday, the latest for completion by Friday. There are still a bunch with Navy including the sublease review. I'm attaching all the pending questions, but I really only need your assistance on the following. You didn't address these the last time. Can you give me something today?

No.	Title	Page / Sheet No.	Instruction of GPA Amd XIII	PEC Questions	GPA - reply
4	3. Technical Requirements for ESS and Inverters	162/948	The Bidders and their associated equipment providers must demonstrate the detailed performance and capability of their equipment under the extreme electrical conditions expected on Guam. This includes providing the technical limitations for the operation of the equipment for specific system conditions, as well as a description and demonstration of the various operating modes for the equipment.	<p>1) When will these documents need to be submitted to GPA? During technical bid submission or after the successful bidder has been selected?</p> <p>2) Can GPA provide an example of extreme electrical conditions?</p>	<p>1) Bidders should demonstrate the proposed projects ability to address these issues in their technical proposals.</p> <p>2) Response forthcoming</p>