



INVITATION FOR MULTI-STEP BID

GPA-034-18

BUILD, OPERATE & TRANSFER CONTRACT FOR 180MW OF NEW GENERATION CAPACITY

Section D: Forms

SEPTEMBER 2018



Table of Contents

1	FORM 1 - PROPOSAL LETTER	5
1.1	Attachment 1A - Form of Bid Guarantee	8
1.2	Attachment 1B - Proposal Opening Form	10
2	FORM 2 – AFFIDAVIT BY THE BIDDER (Page 1 of 2)	12
2.1	Attachment 2-A: Certificate from Parent Company (if applicable)	14
2.2	Attachment 2-B: Tax Statement (Optional)	15
2.3	Attachment 2-C: Litigation Pending (Optional)	16
3	FORM 3 – BIDDER’S ORGANIZATION	17
3.1	Form 3-A: Letter of Agreement from Team Member (if applicable)	19
4	FORM 4 – FINANCIAL CAPABILITY	20
4.1	Attachment 4-A - Certificate of Availability of Bank Guarantee	22
5	FORM 5 – PROJECT DATA SHEETS	23
6	FORM 6 – PROJECT FINANCING PLAN	27
7	FORM 7 – FINANCIAL DATA IN SUPPORT OF PROJECT	28
7.1	Financing Plan	28
7.2	Financing Plan Documentation	29
7.3	Debt Service Coverage and Equity Ratios Projections	30
8	FORM 8- TECHNICAL DATA	32
8.1	Guaranteed Data for Project	32
8.2	Basic Technical Information	33
8.3	Drawings	34
8.4	Proposed Facility Design and Components Experience	35
8.4.1	Overall Design of Facility	35
8.4.2	Information on Other Equipment	35
8.4.3	Information on EPC Contractor and Engineering and Design Subcontractors	35
8.5	Detailed Technical Information	35
8.6	Drawings	46
8.7	Performance Correction Curves	48
8.8	Commercial Operation Tests Procedures	50
8.9	Project Summary Data	50
8.9.1	Type of plant:	50
8.9.2	Fuel to be used	50
8.9.3	Combustion Turbine, Reciprocating Engine, and Generator Suppliers.	50
8.9.4	Solar Module, Wind Turbine, Inverter, and Energy Storage System Suppliers and other proven renewable technologies.	50
8.9.5	Describe Standards Applied to Project Design and Equipment Selection.	50

8.9.6	Suppliers of Major Equipment	51
8.9.7	List of Participants.	51
8.9.8	Additional Data	52
8.10	Environmental Data	53
8.10.1	Air Emissions	54
8.11	Electric Interconnection Data	57
8.11.1	Items to Be Provided	57
8.12	Performance Data	57
8.13	Technology and Design Data	60
8.13.1	Technical Maturity:	60
8.14	Operations and Maintenance Data	61
8.14.1	Operating Characteristics	61
8.14.2	Operating Parameters	61
8.14.3	Maintenance	62
8.14.4	Operations and Maintenance Staff and Services	63
9	FORM 9 – ADDITIONAL SUPPORTING DATA	65
10	FORM 10 – EXCEPTIONS TO THE IFMSB DOCUMENT	66
11	FORM 11 – BIDDER’S PROJECT SCHEDULE	67
11.1	Bidder's Milestone Schedule	67
12	FORM 12 – BIDDER’S STAFFING PLAN	69
12.1	BIDDER'S PROPOSED HOME OFFICE (OFF-SHORE) ORGANIZATION	69
12.2	BIDDER'S PROPOSED SITE (ON-SHORE) ORGANIZATION	69
13	FORM 13 – MANDATORY FORMS REQUIRED IN ACCORDANCE WITH GUAM PROCUREMENT LAW	71
13.1	Major Shareholder Disclosure Affidavit	72
13.2	Non-Collusion Affidavit	74
13.3	No Gratuities or Kickbacks Affidavit	75
13.4	Ethical Standards Affidavit	76
13.5	Declaration Re-Compliance with U.S. DOL Wage Determination	77
13.6	Special Provisions	79
13.7	Local Procurement Preference Application	80
13.8	Government of Guam General Terms and Conditions	82
13.9	Sealed Bid Solicitation Instructions	88
14	Form 14 - Reserved	93
	ENVELOPE II (Sealed Separately)	94
15	FORM 15 – PROPOSED PRICE	95
15.1	Schedule of Commercial Operation	95
15.2	Proposed Fixed Capacity Charges (FCCs)	96

15.3	Fixed Operations & Maintenance Charge (FOMC)	97
15.4	Variable O&M Charge (VOMC)	97
15.5	Fuel Charge (FC)	97
15.6	Supplemental Charges	102
15.6.1	Startup Charges	102
15.6.2	Synchronous Condenser O&M Charges	103
15.7	Evaluated Present Value	103
15.7.1	Assumptions for Evaluation	104
15.7.2	Resulting Present Value	105

1 FORM 1 - PROPOSAL LETTER

John M. Benavente, P.E.
General Manager
Guam Power Authority
Post Office Box 2977
Hagatna, Guam 96932-2977
Attention: Supply Management Administrator
Email: jpangelinan@gpagwa.com
Phone: (671) 646-3054/55
Fax: (671) 648-3165

The undersigned,

Last Name: _____
First Name: _____
Title/Position: _____

Located at the following address:

Telephone:

E-mail:

Fax:

Acting:

As the representative of the company¹ _____,

Lead Bidder of the Consortium composed of the following members:

1. _____
2. _____
3. _____
4. _____

and on behalf of said Consortium, in view of the Power of Attorney provided by each of the members².

¹ Include legal authorization

² Include Powers of Attorney

Having examined the whole of the IFMSB documents, receipt of which is duly acknowledged, for the development of a ULSD/gas-fired, power Facility, on a BOT basis, in Guam ("the Project"), comprised of the following documents:

Invitation for Bid (IFMSB), dated [2018]

Draft Agreements, dated [2018]

[Supplemental Information

Amendment No. 1

Amendment No. 2

Amendment No. 3...]

Having evaluated, following our own studies undertaken under our responsibility, the nature and scope of the contractual obligations to be executed, the financing structure, the Security Package, as defined in the ECA, and any other regulation associated to the Project or its execution, we commit ourselves to design, finance, procure, construct, own, operate, and maintain the whole of the Project, power Facility in Guam, and to sell the electricity generated exclusively to GPA for an Initial Term of twenty-five (25) years, in conformity with the schedule and conditions stipulated in the IFMSB documents and for a Present Value in United States Dollars as calculated in Form 15 hereof.

We agree to abide by this Proposal and maintain its validity for a period of twelve (12) months from the Bid Date as prescribed in the Instructions to Bidders, Section B, Article 4.7 entitled "Proposal Validity".

We accept to remain bound by this Proposal which may be accepted by GPA at any time before the expiration of that period.

We commit ourselves, if we are selected, to extend the validity of our Proposal and our Bid Guarantee until execution of the Project Agreements and our presentation of the Performance Bond.

We have provided and attached hereto a Bank Guarantee for Three Million United States Dollars (USD 3,000,000.00) in accordance to the form provided herein.

We acknowledge GPA's standard of ethics, as described immediately below:

GPA requires that all Bidders observe the highest standard of ethics during the procurement process. In pursuance of this policy GPA:

- a) defines for the purposes of this standard of ethics, the terms set forth below as follows:

"Corrupt Practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of any value to influence the action of a public official involved in the procurement process or in contract execution;

"Fraudulent Practice" means a misrepresentation or omission of fact in order to influence the procurement process or the execution of a contract;

"Collusive Practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of GPA, designed to establish bid prices at artificial, non-responsive, levels; and

“Coercive Practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract.

- b) will declare a Bidder ineligible for the Project and reject the Bidder’s Proposal if it determines that the Bidder engaged in any Corrupt, Fraudulent, Collusive or Corrupt Practices in competing for the Project.

We certify that (i) the information submitted as part of this Proposal is complete and accurate, (ii) the Proposal has been submitted in the legal name of the Consortium whose members will be bound to this Proposal and to the development of the Project, (iii) we accept the documents and terms of the IFMSB documents, and (iv) there are no material deviations in our Proposal from the terms and conditions of the draft Energy Conversion Agreement.

We understand that the GPA is not bound to accept any Proposal that it may receive.

In _____ (location) ,
on this _____ (date) _____

The Lead Bidder, duly authorized to execute the Proposal for and on behalf of the Consortium:

Notarized signature and seal

Attachments:

- ATTACHMENT 1-A Form of Bid Guarantee
- ATTACHMENT 1-B Proposal Opening Form

1.1 Attachment 1A - Form of Bid Guarantee



GUAM POWER AUTHORITY

ATURIDÁT ILEKTRESEDÁT GUAHAN

P.O. BOX 2977 HAGÁTÑA, GUAM U.S.A. 96932-2977

Edward J.B. Calvo
Governor

Telephone Nos. (671) 648-3054/55 Fax: 648-3165

Raymond S. Tenorio
Lieutenant Governor

BID GUARANTEE

NO.: _____

KNOW ALL MEN BY THESE PRESENTS that _____, as

Principal Hereinafter called the Principal, and (Bonding Company), _____ A duly admitted insurer under the laws of the Territory of Guam, as Surety, hereinafter called the Surety are held firmly bound unto the Territory of Guam for the sum of _____ Dollars (\$_____), for Payment of which sum will and truly to be made, the said Principal and the said Surety bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for (identify project by number and brief description) _____

NOW, THEREFORE, if the Territory of Guam shall accept the bid of the Principal and the Principal shall enter into a Contract with the Territory of Guam in accordance with the terms of such bid, and give such bond or bonds as may be specified in bidding or Contract documents with good and sufficient surety for the faithful performance of such Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Territory of Guam the difference not to exceed the penalty hereof between the amounts specified in said bid and such larger amount for which the Territory of Guam may in good faith contract with another party to perform work covered by said bid or an appropriate liquidated amount as specified in the Invitation for Bids then this obligation shall be null and void, otherwise to remain full force and effect.

Signed and sealed this _____ day of _____ 2018.

(PRINCIPAL)

(SEAL)

(WITNESS)

(TITLE)

(MAJOR OFFICER OF SURETY)

(TITLE)

(TITLE)

(RESIDENT GENERAL AGENT)

SEE SPECIAL REMINDERS TO PROSPECTIVE BIDDERS (FORM Error! Reference source not found.) FOR SUPPORTING DOCUMENTS REQUIRED.

INSTRUCTION TO PROVIDERS:

NOTICE to all Insurance and Bonding Institutions:

The Bond requires the signatures of the Vendor, two (2) major Officers of the Surety and Resident General Agent, if the Surety is a foreign or alien surety.

When the form is submitted to the Guam Power Authority, it should be accompanied with copies of the following:

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.

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

1.2 Attachment 1B - Proposal Opening Form

(This document is an integral part of the Proposal and shall be read during the Bid Opening.)

A) Name of Lead Bidder _____

B) Names of Consortium Members _____

C) Phase 1 Contracted Facility Capacity Using
ULSD (for fossil fuel fired or hybrid Projects)

_____ MW

D) Phase 1 Contracted Facility Capacity Using
Natural Gas (for fossil fuel fired or hybrid
Projects)

_____ MW

E) Phase 2 Contracted Facility Capacity Using
ULSD (for fossil fuel fired or hybrid Projects)

_____ MW

F) Phase 2 Contracted Facility Capacity Using
Natural Gas (for fossil fuel fired or hybrid
Projects)

_____ MW

G) Guaranteed Amount of Renewable Energy
(for hybrid Projects)

_____ MWh/year

H) Contracted Facility Capacity for Projects that
do not operate on fuel

_____ MW

I) Annual Availability Guarantee

_____ %

J) Forced Outage Rate Guarantee (can be no
higher than 3%)

_____ %

- K) Are there any exceptions taken to the IFMSB terms and conditions, as detailed in Exhibit VII? YES: _____ NO: _____
- L) Are there any technical exceptions taken to the IFMSB, as detailed in Exhibit VII? YES: _____ NO: _____
- M) Are there any exceptions taken to draft Project Agreements, as detailed in Exhibit VII?
- | | | |
|-------|------------|-----------|
| ECA: | YES: _____ | NO: _____ |
| LLA: | YES: _____ | NO: _____ |
| WSA | YES: _____ | NO: _____ |
| Other | YES: _____ | NO: _____ |

2 FORM 2 – AFFIDAVIT BY THE BIDDER (Page 1 of 2)

The undersigned, _____, of legal age, and residing at _____
(Name of Official)

after having been duly sworn deposes and states:

1. That he is the _____ of the _____,
(Official Capacity) (Name of the Bidder's (Lead Bidder's) Company /Corporation)

corporation/association/individual, duly organized under the law of _____
(Name of Country)

2. That personally, and as _____ for and in behalf of the corporation /
(Official Capacity)

association/individual (by and under the authority indicated on Attachment 1-A) he hereby certifies:

- a) That all statements made in this Bidder's statement and in the required attachments are true and correct;
- b) That this Bidder's statement is made for the express purpose of identifying and describing him as a Qualified Bidder for the Project located in Guam;
- c) That all Bidder information required in Section B, Article 3.2.1 are submitted herein, in substantially the formats required;
- d) The Bidder will make available to GPA or its authorized agency any information they may find necessary to verify any item in this Bidder's Statement or regarding his competence and general reputation;
- e) That the Lead Bidder (and parent firm if applicable) is current with regard to payment of all national and local taxes within its nation of incorporation, and in all nations in which this firm is participating in power projects (except as noted on Attachment 2-B);
- f) That the Lead Bidder (and parent firm if applicable) is not the subject of litigation--within its nation of incorporation, and in all nations in which this firm is participating in power projects--that would materially affect its ability to develop this Project (except as noted on Attachment 2-C);

FORM 2 - AFFIDAVIT BY THE BIDDER (Page 2 of 2)

- g) That the undersigned is duly authorized by the corporation/association/individual to make these representations and to sign this Statement.

Name and Signature

WITNESSES:

1. _____ 2. _____

SUBSCRIBED AND SWORN TO before me

this ____ day of ____ 20__

at _____.

Notary Public

Attachments (if applicable):

Attachment 2-A: Certificate from Parent Company (pursuant to Form 2, paragraph 2)

Attachment 2-B: (Optional) Tax Statement (pursuant to Form 2, paragraph 2.e.)

Attachment 2-C: (Optional) Litigation Pending (pursuant to Form 2, paragraph 2.f.)

2.1 Attachment 2-A: Certificate from Parent Company (if applicable)

2.2 Attachment 2-B: Tax Statement (Optional)

2.3 Attachment 2-C: Litigation Pending (Optional)

3 FORM 3 – BIDDER’S ORGANIZATION

(Page 1 of 2)

Applicant

Each Consortium member of the Bidder’s proposed organization, or joint venture, must fill out this Form.

1. Date of Submission: _____
2. Company’s Name _____
3. Year Organized: _____
4. Country Incorporated _____
5. Type of Organization: _____
6. Local Address: _____

7. Home Address: _____
(Local office supporting
this Proposal) _____

8. Contact Person: _____
9. Other Contact Means:
 Telefax No.: _____
 Electronic Mail: _____
10. Corporate objectives or purposes of the lead firm:

[Continued]

FORM 3 – BIDDER’S ORGANIZATION

(Page 2 of 2)

11. Provide in the table below the name and address of lead and associated firms to be involved in this Project (to the extent known at this point):

Table 3.1: Bidder’s Team and Responsibilities

Name of Proposed Project Company: _____

Location of Incorporation:¹ _____

Type of Company: _____

Role in This Project	Company (Name and Address)	Level of Commitment (Firm, Expected, Possible)	Supporting Data Attached as Form 9 (For Each Firm) (If Any) (Yes/No)
Bidder – Lead Developer		NA	NA
Bidder – Co-Developer(S)			
[Optional: EPC Contractor]			
[Optional: Equipment Supplier]			
[Optional: O&M Contractor]			
Project Engineer			
Financial Advisor			
Legal Advisor			
Equity Participants			
Senior and Subordinated Debt Participants			

Attachments:

Attachment 3A: Letters of Agreement from Team Members (Note: The EPC Contractor, Equipment Supplier and O&M Contractor are identified by the Bidder in its IFMSB Proposal submittal.)

¹ Including the location of any affiliated special-purpose Project Companies.

3.1 Form 3-A: Letter of Agreement from Team Member (if applicable)

4 FORM 4 – FINANCIAL CAPABILITY

(Page 1 of 2)

- 1 Each member of the Bidder's Consortium, co-Bidder, or joint venture partner must fill in this form. Bidders, including each member of a team, should provide financial information in the form of their most recent annual reports and audited financial statements to demonstrate that they meet the requirements stated in Section B, Article 6.4.1.
- 2 Provide the complete contact information for the Bidder's main banker(s) and other financial institutions/references that may be familiar with the Bidder's financial capability.

Name of Banker	
Address of Banker	
Telephone(s)	Contact Name and Title
Fax Number	E-Mail Address

- 3 Attach a notarized affidavit (see Attachment 4A below) from an internationally recognized bank that confirms the Bidder's ability to provide the necessary Performance Bond deposit upon being selected to develop the Project.
- 4 Please attach a notarized affidavit from an internationally recognized bank or financial institution that confirms the Bidder's ability to provide the six (6) months of Working Capital that will be required to develop this Project from Notification of Selection (award) to Financial Close.
- 5 Please provide your current maximum limits under each of the following types of Performance Guarantees:

- A) Performance Bond _____ US\$
- B) Bank Guarantee _____ US\$

[Continued]

FORM 4 - FINANCIAL CAPABILITY

(Page 2 of 2)

6 Have you provided performance guarantees for other projects? Please provide the information in the table below.

Name & Address of Surety Company or Financial Institution	Name and Location of the Project	Name and Address of the Project Owner	Type of Guarantee	Amount of Guarantee
1.				
2.				
3.				
4.				
5.				

7. Have you ever had to forfeit a performance guarantee?

Yes No

If yes, please explain:

Attachments:

Attachment 4-A: Certificate of Availability of Bank Guarantee

4.1 Attachment 4-A - Certificate of Availability of Bank Guarantee

- 1 **Background.** Should the Bidder be selected as the Bidder to develop the Project, it will be required to furnish GPA a Performance Bond in the form of an irrevocable stand-by letter of credit issued by an international bank acceptable to GPA, a bank guarantee issued by an international bank in form and substance acceptable to GPA, or a performance bond issued by an international surety in form and substance acceptable to GPA, in each case in the amount of US seventy-five million (\$75,000,000). This Performance Bond shall be valid until three (3) months after the Project Company achieves the Commercial Operation Date of the Facility in accordance with the ECA.
- 2 **Requirement.** The Bidder is required to provide in this Bidder Statement (as its Form 4-A) a notarized affidavit from the Bidder's bank stating that they can issue on behalf of the Bidder the required Performance Bond, in the amount of US seventy-five million (\$75,000,000) to the benefit of GPA at the projective time that such Security will need to be issued.

5 FORM 5 – PROJECT DATA SHEETS

(Page 1 of 2)
(One for Each Project)

PROJECT NAME _____

LOCATION (City & Nation) _____

OVERALL CAPACITY (MW, other) _____

CHARACTERISTIC	TOTAL	UNIT 1	UNIT 2	UNIT 3	RENEWABLE GENERATION	ENERGY STORAGE
CAPACITY (MW, other)						
TECHNOLOGY (incl. Fuel & Type of Cycle)						
WHAT FIRMS PLAYED THESE ROLES ON THE PROJECT:						
Lead Developer						
Co-Developer(s)						
Equity Participant(s)						
Debt Participant(s)						
EPC Contractor						
O&M Contractor(s)						
Equipment Supplier(s)						
FINANCING EXPERIENCE:						
Total Equity (US\$___M)						
Bidder's Equity (US\$___M)						
Total Debt (US\$___M)						
Bidder's Debt (US\$___M)						
Date of Financial Close						
TECHNICAL DATA:						
Major Equipment Installed (& Cost)						
Turbines						
HRSGs						

Reciprocating Engine Generators						
Solar Modules						
Inverters						
Wind Turbines						
Energy Storage (batteries, compression systems, other)						
Balance of Plant						
Civil Works						

(Continued)

FORM 5 - PROJECT DATA SHEETS (Page 2 of 2)

Characteristic	Total	Unit 1	Unit 2	Unit 3	RENEWABLE GENERATION	ENERGY STORAGE
Performance:						
Commercial Operations Date (COD):						
Construction Period (months)						
Operating History to 2017 (years)						
Availability (%):						
2014						
2015						
2016						
2017						
Efficiency (%)						
2014						
2015						
2016						
2017						
Heat Rate (Btu/kWh)						
2014						
2015						
2016						
2017						
Production (GWh)						
2014						
2015						
2016						
2017						
Environmental Compliance History: (Describe)						
Name, address, and contact numbers of Owner (for reference):						
Name, address, and contact numbers of Operator (for reference):						

[Optional] These Certificates and Brochures are Attached:		
Certificate of Final Acceptance YES / NO		
Certificate of Good Operating Performance YES / NO		
Project Brochure or Fact Sheet YES / NO		
Other: _____ YES / NO		

6 FORM 6 – PROJECT FINANCING PLAN (Conceptual)

1 List in the table below the potential sources of equity and debt for the Project.

Assume: US\$ ____MM minimum to be raised overall, with minimum equity-debt ratio of 20:80.

Equity (20% Minimum)		
Source of Funds	NAME ¹	Amount (US\$)
Bidders (Minimum of 20%)		
Contractors		
Local Sources		
Other Sources		
	TOTAL:	
Debt (80% Maximum)		
Source of Funds	NAME ¹	Amount (US\$)
Supplier Credit		
Commercial Sources		
Bi-lateral Sources		
Multi-lateral Sources		
Other Sources		
	TOTAL:	
	TOTAL Financing:	

2 Discussion:

¹ Names of financial institution(s) or sources of funding.

7 FORM 7 – FINANCIAL DATA IN SUPPORT OF PROJECT

7.1 Financing Plan

The Bidder will be responsible for mobilizing the financing for the Facility. Agreements required to secure financing for the Project will be entered into between the Bidder and the institutions providing the financing for the Project, and they shall be based on the financial plan presented by the Bidder in its Proposal. Any subsequent changes to the financial plan after finalization of the Project Agreements will require the approval of GPA.

The financial plan provided by the Bidder will describe the sources of funds and the terms of financing for both debt and equity, as applicable. The Bidder will provide details on the financing sources as outlined in this Form 7A, Table 1. The financing should be in an amount sufficient to cover all estimated Project costs.

Financing will be in the form of equity and debt. At least 20% of the total financing, inclusive of contingencies, will be in the form of equity and the remainder in debt or subordinated debt. At least 35% of the equity shall be provided by the Lead Bidder.

	Sources of Funds	US\$
	Items / Sources	
1.1	Total Sources²	
1.2	Equity	
	<ul style="list-style-type: none"> Lead Bidder Name: _____ 	
	<ul style="list-style-type: none"> (Member(s) of Bidder Consortium) Name: _____ 	
	<ul style="list-style-type: none"> (Member of Bidder Consortium) Name: _____ 	
	<ul style="list-style-type: none"> (Member of Bidder Consortium) Name: _____ 	
	<ul style="list-style-type: none"> Contractor/Supplier Name: _____ 	
	<ul style="list-style-type: none"> Contractor/Supplier Name: _____ 	
	<ul style="list-style-type: none"> Other sources (specify) Name: _____ 	
1.3	Debt Financing	
	Export Credit Agencies <i>(List individually)</i>	

	Sources of Funds	US\$
	Items / Sources	
	<ul style="list-style-type: none"> Export Credit Agency Name: _____ 	
	<ul style="list-style-type: none"> Export Credit Agency Name: _____ 	
	<ul style="list-style-type: none"> Export Credit Agency Name: _____ 	
	Commercial Sources <i>(List individually)</i>	
	<ul style="list-style-type: none"> Commercial source Name: _____ 	
	<ul style="list-style-type: none"> Commercial source Name: _____ 	
	Multilateral Sources <i>(List individually)</i>	
	<ul style="list-style-type: none"> Multilateral source Name: _____ 	
	<ul style="list-style-type: none"> Multilateral source Name: _____ 	
	Other Sources <i>(List individually)</i>	
	<ul style="list-style-type: none"> Other source Name: _____ 	
	Total Debt:	

7.2 Financing Plan Documentation

The following documentation is to be provided in support of the financing plan outlined in Form 7A. Please fill in each section below, however, if any of the Bidder information is combined into a single document from a Lender, then the Bidder must make a reference to the particular attachment where the information can be found.

Attachment 7.2.1

Letters of commitment from the Chief Executive Officer or Treasurer/Controller of each of the companies verifying that the company will commit to contributing the amount of equity stated in Form 7A, Table 1, Section 1.2.

- Attachment 7.2.2 Letters of commitment from the Export Credit Agencies, Commercial Sources and/or Multilateral Sources and/or financial institutions committing to the amount of debt financing stated in Form 7, Table I, Section 1.3. The letter should also indicate the method of payment, repayment period, interest rates (fixed or variable), and any other charges applicable to the commitment. The letter shall also verify that the commitment is made based upon the draft of Project Agreements, the Bidder's Proposal, and adequate debt coverage.

- Attachment 7.2.3 If the Bidder has obtained an underwriting for all or part of the amount, a letter from the financing institution of such undertaking.

- Attachment 7.2.4 In the event that, the Bidder has appointed a financial advisor/arranger for the Facility, the name of the organization, the lead person who will perform the services from the organization, and a qualification statement for the organization and the lead person.

- Attachment 7.2.5 Should the Bidder plan to have financing for the Facility at a later date, i.e. on or following the Commercial Operation Date, details of financing arrangements prior to the long-term financing being effective.

- Attachment 7.2.6 A detailed schedule of activities leading to Financial Close in Form 11.

- Attachment 7.2.7 The Bidder's planned projected coverage for interest rate variations.

7.3 Debt Service Coverage and Equity Ratios Projections

DEBT SERVICE COVERAGE & EQUITY RATIOS (PROJECTED)			
Agreement Period	Year	Debt Service Coverage Ratio (See 7.3.1)	Equity Ratio (See 7.3.2)
Contract Year 1			
Contract Year 2			
Contract Year 3			
Contract Year 4			
Contract Year 5			
Contract Year 6			
Contract Year 7			
Contract Year 8			
Contract Year 9			
Contract Year 10			

DEBT SERVICE COVERAGE & EQUITY RATIOS (PROJECTED)			
Agreement Period	Year	Debt Service Coverage Ratio (See 7.3.1)	Equity Ratio (See 7.3.2)
Contract Year 11			
Contract Year 12			
Contract Year 13			
Contract Year 14			
Contract year 15			
Contract Year 16			
Contract Year 17			
Contract Year 18			
Contract Year 19			
Contract Year 20			
Contract Year 21			
Contract Year 22			
Contract Year 23			
Contract Year 24			
Contract Year 25			

NOTES to Table:

- 1 Debt Service Coverage Ratio shall mean the ratio of Cash Flow from Operations to Debt Service, where Cash Flow from Operations means on an annual basis all Project revenue minus all operation and maintenance expenses (including but not limited to, operator costs, Fuel procurement and transportation costs (if any), insurance, management costs, local fees, legal fees, accounting and auditing fees, other professional fees, capital expenditures, and amounts contributed to the debt service and maintenance reserves) before interest, depreciation, and income taxes, and where Debt Service means repayment of all annual principal and interest on debt outstanding during the year to all lenders.
- 2 The Equity Ratio should be calculated as Total Equity divided by the sum of Total Debt and Total Equity.

8 FORM 8- TECHNICAL DATA

8.1 Guaranteed Data for Project

The following data is provided by Bidder and will be subsequently included as Schedules to the ECA. The Price stated in Section D, Form 15 is based upon data furnished herein.

- 1 Contracted Capacity of the Facility for each Year of the Term shall be as specified in **Table 15.1 of Envelope II, and will be consistent with the data provided in Table 8.7 and Table 8.8** of this section below.
- 2 Guaranteed Heat Rates for each Year of the Term for ULSD and Natural Gas operation shall be as specified **in Table 15.5 and Table 15.6 of Envelope II for the Facility, and will be consistent with the data provided in Table 8.3, Table 8.4.**
- 3 **In Table 8.5 and Table 8.6,** the Guaranteed Heat Rate shall consider equipment degradation and any maintenance to be performed on the equipment.
- 4 Bidder shall provide Heat Rates for each Unit at various loads identified in **Table 8.3 and Table 8.4.** This information is based upon new equipment operated for less than 500 hours.
- 5 Bidder shall provide the Correction Curves that are to be used to verify the performance (i.e. Contracted Facility Capacity and Guaranteed Heat Rates). Only those curves provided by the Bidder will be taken into consideration for calculations of Facility performance characteristics determined by Testing.
- 6 For Proposals based on a hybrid facility, the Bidder will provide a Guaranteed Amount of Renewable Energy for a Typical Meteorological Year (TMY) and a guaranteed maximum annual degradation factor. The Guaranteed Amount of Renewable Energy will be demonstrated by means of a PVSyst production forecast (in the case of PV solar) or a WindSim production forecast (in the case of wind), each assuming TMY conditions and submitted along with the Contracted Capacity as part of Envelope II.
- 7 Bidder shall provide guarantees for Facility annual availability and forced outage rate
- 8 Bidder shall provide the following guaranteed data for environmental impact assessment.
 - A. Noise levels
 - At Site boundary
 - At one meter from major equipment
 - At one hundred meters from major equipment
 - B. Air emissions

Maximum anticipated levels of NO_x, CO, VOC, PM₁₀, and SO_x, based on the fuel characteristics provided in the IFMSB.
 - C. Water discharge:
 - Provide particulate concentration and composition of wastewater discharge, other than sanitary discharge.

- Provide provisions made for treatment of wastewater and sanitary water.
 - 9 Auxiliary load consumption
- Provide Facility auxiliary load consumption, in MW.
 - 10 Provide information requested in paragraph 8.14 with respect to characteristics of the Facility (i.e. cold start time, etc.)

8.2 Basic Technical Information

- 1 Provide a short description of the Facility, and supporting facilities and Site infrastructure.
- 2 Source of major components.

Component	Information Requested	Manufacturer / Model / Type
Combustion Turbine Generator(s)	Manufacturer	_____
	Model/type	_____
Reciprocating Engine Generator(s)	Manufacturer	_____
	Model/type	_____
Steam Turbine Generator(s)	Manufacturer	_____
	Model/type	_____
Heat Recovery Steam Generator(s)	Manufacturer	_____
	Model/type	_____
Once Through Steam Generator(s)	Manufacturer	_____
	Model/Type	_____
Cooling Tower	Manufacturer	_____
	Model/type	_____
Control system	Manufacturer	_____
	Model/type	_____
Generator Step-up Transformers	Manufacturer	_____
	Model/type	_____

Medium Voltage Switchgear	Manufacturer	_____
	Model/type	_____
Solar Photo voltaic	Manufacturer	_____
	Model/type	_____
Inverters	Manufacturer	_____
	Model/type	_____
Wind Turbines	Manufacturer	_____
	Model/type	_____
Battery Energy Storage System	Manufacturer	_____
	Model/type	_____

- 3 Describe the equipment for filtering at the air inlet for the combustion turbines (for salt, dust, etc.).
- 4 Provide a listing of the codes and standards to be used in design, manufacturing, construction, performance testing, and quality control for civil, electrical, mechanical and control/instrumentation works of the Project. (Refer to Section C, Article 2).
- 5 Describe provisions made for SCADA system.
- 6 Provide temperature in combustion chamber at 100% load and for exhaust gas of combustion turbines in simple cycle at the combustion turbine exhaust and at the stack outlet.

8.3 Drawings

Provide the following drawings as a minimum:

- Conceptual station layout drawings
- General arrangement drawings of all buildings
- Exterior elevation drawings of all buildings
- Heat balance diagram for plant
- Water balance diagram for plant
- P&ID's of major systems
- Single line electrical diagram including protection
- Control room layout
- Pipeline route
- Transmission Line

8.4 Proposed Facility Design and Components Experience

Bidder shall provide historical data for the following items:

8.4.1 Overall Design of Facility

If a Facility of similar size (100 MW and above) or with similar major equipment (reciprocating engines, combustion turbines, solar modules, inverters, wind turbines and other renewable generation and/or energy storage), with similar design of systems and preferably the same equipment manufacturer, has been operating for the past three (3) years, provide the name of the Facility, year commissioned, name of owner and representative (phone and Fax number), with data on reliability, availability, Gigawatt hours (GWh) produced for each of the last two (2) years, and the number of forced outages or reduced output due to technical difficulties. Information on more than one Facility is desirable but not mandatory.

8.4.2 Information on Other Equipment

For the following equipment to be used in the Facility, provide similar information, as above (and as applicable), from manufacturers for at least three (3) projects, for the past three (3) years.

- Combustion Turbine Generators
- Reciprocating Engine Generators
- Steam Turbine Generators
- Solar Modules
- Inverters
- Energy Storage
- Wind Turbines
- Other renewable energy technologies

8.4.3 Information on EPC Contractor and Engineering and Design Subcontractors

Bidder shall provide information on qualifications and experience of proposed Construction Contractor and engineering and design subcontractors (if any).

8.5 Detailed Technical Information

Bidder shall fill out all applicable portions of the data sheets provided herewith. If the information is not available at the Proposal stage, the Bidder will be required to complete the same at time of the meetings to complete the Project Agreements.

DATA SHEETS		
Description		Bidder's Response:
	As a minimum, the following data sheets, drawings, and performance curves relating to the Project Company's proposal shall be provided:	Insert in this column all the data requested or the page number in the Proposal where the information is provided.
8.5.1	<u>Combustion turbines</u> (Performance at Reference Site Conditions)	

DATA SHEETS				
Description		Bidder's Response:		
			ULSD	Natural Gas
	Combustion turbine manufacturer			
	Model/type			
	Gross output (at generator terminals)	kW		
	Gross Heat Rate (HHV)	Btu/kWh		
	RPM			
	Air Flow at inlet	lb/hr.		
	Fuel consumption	lb/hr.		
	Water injection	lb/hr.		
	Fuel pressure required	psig		
	Air inlet filter type			
	Turbine/compressor water wash	yes/no		
	Ramp rate	kW/sec		
	<u>Fire protection:</u>			
	- CO ₂ System	yes/no		
	<u>Detectors:</u>			
	- Temperature detectors	yes/no		
	- Smoke detectors	yes/no		
	- UV detectors			
	<u>Silencers:</u>			
	- Manufacturer			
	- Correction curves for fouling shall be provided. Deterioration factor is considered from 200 h after start of Commercial Operation			
	<u>Governor (IEEE model)</u>			
8.5.2	<u>Reciprocating Engine Generators</u> <u>(Performance at Reference Site Conditions)</u>			
			ULSD	Natural Gas

DATA SHEETS			
Description		Bidder's Response:	
	Reciprocating Engine manufacturer		
	Model/type		
	Gross output (at generator terminals)	kW	
	Gross Heat Rate (HHV)	Btu/kWh	
	RPM		
	Air Flow at inlet	lb/hr.	
	Fuel consumption	lb/hr.	
	Fuel pressure required	psig	
	Air inlet filter type		
	Ramp rate	kW/sec	
	<u>Fire protection:</u>		
	- CO ₂ System	yes/no	
	<u>Detectors:</u>		
	- Temperature detectors	yes/no	
	- Smoke detectors	yes/no	
	- UV detectors	yes/no	
	<u>Silencers:</u>		
	- Manufacturer		
	- Correction curves for fouling shall be provided. Deterioration factor is considered from 200 h after start of Commercial Operation		
	<u>Governor (IEEE model)</u>		
	Fuel temperature at Reciprocating Engine Generator	°F	
	<u>Turbochargers</u>		
	- Manufacturer		
	<u>Radiators (if used)</u>		
	- Manufacturer		
	<u>Air Coolers (if used)</u>		
	- Manufacturer		

DATA SHEETS			
Description		Bidder's Response:	
8.5.3	<u>Steam turbines</u> (Performance at Reference Site Conditions)		
	Steam turbine manufacturer		
	Model/type		
	Gross output (at generator terminals)	kW	
	Turbine efficiency	%	
	RPM		
	Steam Flow at inlet	lb/hr.	
	Steam pressure at inlet	Psig	
	Steam temperature at inlet	°F	
	Exhaust pressure	In Hga	
	Quantity of Extraction(s)		
	Extraction pressure(s)	psig	
	<u>Governor (IEEE model)</u>		
	-		
8.5.4	<u>Heat Recovery Steam Generators</u> (Performance at Reference Site Conditions)		
	HRSG manufacturer		
	Model/type		
	Duct burner heat input	MMBtu/hr	
	Gas temperature at stack	°F	
	HP Steam Flow	Lb/hr	
	HP Steam Pressure	Psig	
	IP Steam Flow	Lb/hr	
	IP Steam Pressure	Psig	
	LP Steam Flow	Lb/hr	
	LP Steam Pressure	psig	
	SCR Catalyst	Yes/no	
	Catalyst type		

DATA SHEETS			
Description		Bidder's Response:	
8.5.5	<u>Cooling Tower</u>		
	<u>Cooling Tower manufacturer</u>		
	<u>Model/type</u>		
	<u>Number of cells</u>		
	Water flow rate	gpm	
	Heat Load	MMBtu/hr	
	Design wet bulb temperature	°F	
	Approach temperature	°F	
	<u>Solar Photovoltaic Panel(s)</u>		
	<u>Manufacturer</u>		
	<u>Model/Type</u>		
	<u>Panel physical size (LxWxH)</u>		
	<u>Panel Power Output (nominal)</u>		
	<u>Panel DC voltage (nominal)</u>		
	<u>Number of panels proposed</u>		
	<u>Single or dual axis sun tracking</u>		
	<u>Inverter(s)</u>		
	Manufacturer		
	Model/Type		
	DC voltage (nominal)		
	AC voltage (nominal)		
	Number of AC phases		
	MVA capacity		
	Power factor range (leading/lagging capability)		
	Power electronic topology		
	IEEE 1547 compliant?		
	Total harmonic distortion (THD% voltage, open circuit)		

DATA SHEETS			
Description		Bidder's Response:	
	Peak Power	W	
	Maximum Power Voltage		
	Maximum Power Current		
<u>Battery Energy Storage System (BESS)</u>			
	Manufacturer		
	Model/Type		
	Energy storage medium (chemical batteries or flywheels)		
	Battery chemistry (if chemical batteries proposed)		
	Inverter (See the above section)		
	Power capacity output and input	MW	
	Energy capacity	MWh	
	<u>Cycle life</u>		
8.5.5	<u>Package Boiler(s)</u>		
	- Manufacturer		
	- Capacity		
	- Fuel		
8.5.6	<u>Water Treatment Plant</u>		
	<u>Primary Treatment:</u>		
	- Manufacturer		
	- Type		
	- Number of streams		
	- Rated capacity of each stream	gpm	
	<u>Demineralized Water Treatment</u>		
	a. Manufacturer		
	b. Type		
	c. Number of Streams		
	d. Rated Capacity of Each Stream	gpm	
8.5.7	<u>Storage Tanks</u>		

DATA SHEETS			
Description		Bidder's Response:	
	a. Raw Water - Number and Capacity	T/gallons	
	b. Demineralized Water-Number and Capacity	T/gallons	
	c. Acid	T/gallons	
	d. Caustic	T/gallons	
	e. Fuel storage	T/barrels	
8.5.8	<u>Generators & Accessories</u>	Combustion Turbines	Diesel Engines
	Generator		
	a. Manufacturer		
	b. Rated voltage at generator terminal (kV)		
	c. Frequency range (Hz)		
	d. Rated Power factor		
	e. Reactance Data		
	f. Insulation class		
	g. Type of cooling		
	h. Design standard		
	i. Efficiency		
	j. Reactive capability ("D") curve		
	k. Saturation & synchronous impedance curves		
	l. Vee curves		
	m Short Circuit Ratio		
	n. Excitation IEEE Model		
	Excitation System		
	a. Type		
	b. Current rating and voltage		
	Neutral Earthing Equipment		
	a. Transformer		
	- Rating (kVA/sec)		

DATA SHEETS			
Description		Bidder's Response:	
	- Voltage ratio		
	- BIL (kV)		
	b. Secondary resistor		
	- Type		
	- Resistance (ohms)		
	- Current rating (A)		
	Generator Circuit Breakers (if required)		
	a. Manufacturer		
	b. Type/Model		
	c. Rated voltage (kV)		
	d. Rated Frequency (Hz)		
	e. Continuous Current rating (kVA)		
	f. Maximum Interrupting current rating (kA)		
	g. Maximum interrupting time (cycles)		
	h. Maximum closing time (cycles)		
	i. BIL rating		
	j. Interrupting medium		
8.5.9	<u>Generator Step-up Power Transformers</u>		
	<u>General</u>		
	a. Quantity		
	b. Manufacturer		
	c. Type		
	d. Applicable Standards		
	<u>Design Data</u>		
	a. Voltage ratio		
	b. Maximum Continuous Rating (MVA)		
	c. Rated temperature rise (°C)		
	d. Basic Insulation Level:		
	- Of HV winding (kV)		

DATA SHEETS			
Description		Bidder's Response:	
	- Of neutral of HV winding (kV)		
	- Of LV winding (kV)		
	- Of neutral of LV winding (kV)		
	e. Type of tap changer (Load or No-Load) and no./ratio of taps		
	f. Total power requirements of auxiliary equipment (kW)		
	g. Power factor		
	h. Insulation class		
	i. Type of cooling		
	j. Type of connection - High voltage winding - Low voltage winding		
	k. Design standard		
	l. Vector Group		
8.5.10	<u>Medium Voltage Switchgear</u>		
	a. General		
	- Manufacturer		
	- Applicable standards		
	b. Design Data		
	- Rated/nominal voltage of switchgear (kV)		
	- Rated insulation level, low frequency/impulse (kV/kV)		
	- Momentary (asymmetrical) current rating (kA)		
	- Breaker interrupting time		
	- Breaker closing time		
	- Bus material and rating		
	- Type of enclosure		
	- Breaker type		

DATA SHEETS			
Description		Bidder's Response:	
	- Short time current rating, 3 sec.		
8.5.11	<u>ULSD Handling and Storage</u>		
	a. Fuel Handling Equipment		
	- Type & Capacity		
	- Metering System		
	- Chemical Analysis (if any)		
	b. Off-loading area		
	- Number of trucks offloading & parked		
	c. Storage Facility		
	- Number of Tanks, Type, and Capacity		
	- Total Capacity of Tanks (in days of supply at for operation at 100% load)		
8.5.12	<u>Natural Gas System</u>		
	a. <u>General</u>		
	- Design basis		
	- Maximum fuel gas required, SCFM		
	- Maximum flow rate required during start-up (shutdown to full speed and no load), SCFM		
	- Minimum fuel gas flow rate at ignition, SCFM		
	- Minimum gas pressure for base load required at Owner's interface, psig		
	- Allowable percentage variation in fuel gas supply pressure		
	▪ Steady state, psi		
	▪ Load changing, psi		
	- System design pressure, psig		
	- Allowable temperature range for fuel gas supply, °F		

DATA SHEETS			
Description		Bidder's Response:	
	- Piping material		
	- Corrosion allowance		
	b. <u>Filter (Per Combustion Turbine Generator)</u>		
	- Manufacturer		
	- Type		
	- Quantity		
	c. <u>Gas Treatment Skids</u>		
	- No. of skids		
	- Location		
	- Waste collection tank (per skid)		
	d. <u>Drains Vessel</u>		
	- Quantity (per Combustion Turbine Generator)		
	- Corrosion allowance		
	- Design standard		
	e. <u>Knockout Vessel</u>		
	- Quantity (per Combustion Turbine Generator)		
	- Design standard		
	f. <u>Metering System</u>		
	- No. of flow meters (per Combustion Turbine Generator)		
	- Manufacturer		
8.5.13	<u>115 kV Switchyard</u>		
	a. General		
	- Supplier		
	- Applicable standards		
	b. Design Data		
	- Rated/nominal voltage (kV)		
	- Rated insulation level, low frequency/impulse (kV/kV)		

DATA SHEETS			
Description		Bidder's Response:	
	- Momentary (asymmetrical) current rating (kA)		
	- Breaker interrupting time		
	- Breaker closing time		
	- Bus material and rating		
	- Breaker type		
	- Breaker manufacturer		
	- Short time current rating, 3 sec.		
8.5.14	<u>Gas Insulated Busbar</u> [if used]		
	- Rated Voltage	kV	
	- Manufacturer		
8.5.15	<u>Wind turbines</u> (Performance at Reference Site Conditions)		
	Wind turbine manufacturer		
	Model/type		
	Gross output (at generator terminals)	kW	
	Total wind plant peak power at Delivery Point	kW	
8.5.16	Other Renewable Generation Technologies		

8.6 Drawings

No.	Drawing Type	Data (or page # on which to find the data)
8.6.1	<u>Outline drawings</u> of Combustion Turbine Generators and/or Reciprocating Engine Generators, Heat Recovery Steam Generators, and Steam Turbine Generators	
8.6.2	<u>Plant Layout</u>	
	1 Overall site layout drawing showing principal dimensions, major plants, cooling towers, radiators, buildings, roads, interfaces with the Electrical Interconnection Facilities, ULSD supply	

No.	Drawing Type	Data (or page # on which to find the data)
	pipelines, natural gas supply pipeline(s), perimeter buffer zones, etc.	
	2 Proposed layout and elevation drawings of all buildings in the Facility. 3 Layouts of ULSD supply pipeline and Electrical Interconnection Facilities.	
8.6.3	<u>Mechanical</u>	
	1 Process flow diagrams for Fuels and auxiliary equipment and systems.	
8.6.4	<u>Electrical</u>	
	1 Electrical single line diagrams (showing equipment ratings) for switchyard, MV switchgear, Unit synchronization plan, step up transformers and overall plant electric system including connections for emergency diesel, if required.	
	2 Principal Protection/Metering block diagram for generators, generator station transformers,).	
	3 One line block diagram for each battery and UPS system.	
	4 One line block diagram for energy metering system.	
	5 Description of philosophy for sizing of station service transformers, switchgear, battery and UPS system.	
	6 Description of generator and excitation systems with block diagrams.	
	7 General arrangement drawings of generator main connections showing generator, generator step-up transformers and excitation transformers.	
	8 Block diagram of proposed Control System) configuration showing all major components of the facility.	
	9 Basic schematics of the power block and common auxiliary plant control systems.	

No.	Drawing Type	Data (or page # on which to find the data)
	10 One line diagram of Electrical Interconnection Facilities including metering system.	

8.7 Performance Correction Curves

	Type of the Curve	Data (or page # on which to find the data)
8.7.1	<u>Combustion Turbine Generator (for each Fuel type)</u>	
	1 Combustion turbine net output versus ambient temperature	
	2 Exhaust flow versus ambient temperature	
	3 Exhaust temperature (after last stage) versus ambient temperature	
	4 Exhaust temperature (after last stage) versus combustion turbine output	
	5 Exhaust flow versus combustion turbine output	
	6 Heat rate versus combustion turbine output	
	7 Heat rate versus ambient temperature	
	8 Fuel flow versus combustion turbine output	
	9 Correction curve for barometric pressure	
	10 Correction curves for variation in ULSD and Natural Gas heating value	
	11 Correction curves for variation in humidity	
	12 Performance degradation (output and heat rate)	
	13 Table showing the expected non-recoverable yearly percent (%) degradation of the net plant output and heat rate	
8.7.2	<u>Reciprocating Engine Generator (for each Fuel type)</u>	
	1 Reciprocating engine output versus ambient temperature	

	Type of the Curve	Data (or page # on which to find the data)
	2 Fuel flow versus engine output	
	3 Heat rate versus engine output	
	4 Heat rate versus ambient temperature	
	5 Correction curve for barometric pressure	
	6 Performance degradation (output and heat rate)	
	7 Correction curves for variation in ULSD and Natural Gas heating value	
	8 Correction curves for variation in humidity	
	9 Table showing the expected non-recoverable yearly percent (%) degradation of the net plant output and/or heat rate	
8.7.3	Entire Facility (for each Fuel type and technology)	
	1 Facility net output versus ambient temperature	
	2 Facility net output versus barometric pressure	
	3 Facility net output versus grid frequency	
	4 Facility net output versus power factor	
	5 Facility net output versus Fuel heating values	
	6 Facility net Heat Rate versus ambient temperature	
	7 Facility net Heat Rate versus barometric pressure	
	8 Facility net Heat Rate versus grid frequency	
	9 Facility net Heat Rate versus power factor	
	10 Facility net Heat Rate versus Fuel heating values	

8.8 Commercial Operation Tests Procedures

The Bidder shall provide Commercial Operation Test procedures for Facility applicable to the respective technology and for testing on both ULSD and Natural Gas in the case of fossil fuel fired generation.

8.9 Project Summary Data

8.9.1 Type of plant:

Describe technology used, number of Units, ratings, and method to recover heat (if used).

8.9.2 Fuel to be used

GPA will be responsible for supply of Natural Gas when it becomes available. Describe the Fuel supply system for the Units (and other any equipment in the Facility that will use this Fuel) including ULSD Supply Infrastructure, ULSD Storage Facilities and Natural Gas system.

8.9.3 Combustion Turbine, Reciprocating Engine, and Generator Suppliers.

Show model identification, when applicable.

8.9.4 Solar Module, Wind Turbine, Inverter, and Energy Storage System Suppliers and other proven renewable technologies.

Show model identification, when applicable.

8.9.5 Describe Standards Applied to Project Design and Equipment Selection.

All designs, materials, and equipment will conform to the requirements of the codes and standards specified in Section C of this IFMSB as well as the requirements of applicable Law and Prudent Utility Practices. The codes and standards that follow will be used where applicable to the equipment, material, components, or construction practices. All work described will be designed, constructed, tested and installed in accordance with the latest edition of the following list of codes and standards (To be completed by the Bidders). In order not to create possible duplication or different interpretations, the names and initials of the respective entities must not be translated.

In the event conflicts arise between the codes and standards of practice described herein and codes, laws, rules, decrees, regulations, standards, etc., of the locality where the equipment is to be installed, the codes and standards of practice described herein will govern. In the event conflicts arise between any of the codes and standards described herein, the more stringent section of the applicable codes will govern. Each of the equipment and designs will comply with one or more of the above codes, but none will necessarily comply with all the listed standards.

8.9.5.1 General design codes

(List)

8.9.5.2 Civil engineering design criteria, standards and codes

(List)

8.9.5.3 Structural engineering design criteria, standards and codes

(List)

8.9.5.4 Mechanical engineering design criteria, standards and codes
(List)

8.9.5.5 Control and electrical engineering design criteria, standards and codes
(List)

8.9.6 Suppliers of Major Equipment

Provide the information requested below for all major equipment suppliers that have been selected for the Project.

Equipment	Supplier's Name
Combustion Turbine Generators, (State Technology)	
Reciprocating Engine Generators (State technology)	
Heat Recovery Steam Generators	
Once Through Steam Generators	
Steam Turbine Generators	
Step-up Transformers	
Control System	
Solar Modules	
Wind Turbines	
Inverters	
Energy Storage Systems	
Other proven renewable generation technologies	

8.9.7 List of Participants.

Check all of the following that have been selected:

Participant	Check if Selected	Name	Status (letter of intent, contract, etc.)
Architect/Engineer			
Environmental Consulting Firm			
Construction Firm			
Operations & Maintenance Contractor			

Other (describe)			
Power Train Subcontractor			
Guam Legal Counsel			
Financial Advisor/Lender			

8.9.8 Additional Data

Attach the following data clearly labeled. Individual data should be numbered to correspond to the question they are addressing; e.g., data submitted in response to Question 8.9.8.1 should be labeled "Form8, Article 8.9.8.1".

- 1 Describe the equipment suppliers' experience with the specific models that will be used for each major piece of equipment as specified in Paragraph 9.3.
- 2 Provide a complete heat and material balance diagram and flow sheet. These diagrams should include sufficient detail to allow GPA to verify the accuracy of the representations. Provide the information for full load, sixty five percent (65%) of full load, and minimum load using performance guarantee conditions listed in paragraph 6.5 of Section C in the IFMSB and assuming the higher heating value (HHV) of the Fuel
- 3 Provide drawings of the Facility's Site layout and major equipment arrangement. Identify the size of major components and describe areas of key equipment redundancy. Identify the area (m²) required for the generating station, radiators and/or air coolers (if used), Fuel storage and Fuel handling facilities.
- 4 Provide any additional technical information that is available (e.g., drawings, specifications, etc.).
- 5 Provide preliminary generator capability curves and specify the reactive capability and control strategies for the Project. Also describe any voltage or equipment limitation affecting the GPA control center's ability to control the reactive output.
- 6 Describe the equipment procurement plan. Provide information concerning how commitments to purchase major equipment items relate to the schedules for acquiring permits and financing. Provide information concerning any equipment production space that has been reserved with suppliers of major components. Note that all equipment must be new.
- 7 Provide descriptions of the fire protection systems to be used including those within any equipment enclosures, any buildings and all general Site facilities.
- 8 Provide descriptions of equipment enclosures (including buildings) and what protection against the weather will be provided to major machines during periods of maintenance, especially if no high-bay buildings are to be constructed.
- 9 Provide a description of the overall control system used for the Project equipment, including all local, centralized and remote controlling including the proposed means to communicate with the GPA control center to follow its instructions.

- 10 Describe how the Facility will be started, including the expected amount of time to synchronize each unit, starting with the equipment in "cold" and "warm" conditions. State the maximum MVA and MW required from the GPA system to start the Facility.
- 11 Provide a description of the monitoring and protection systems to be used on major equipment including the prime movers, generators, transformers, substations and interconnection lines. Describe how the protection systems will be coordinated with the corresponding GPA installations.
- 12 Provide a description of the design of the main and auxiliary equipment cooling, potable and waste waters facilities. Provide a description of the water plan for the project including average, minimum, and maximum water intake and discharge, destination, temperature, quantity and quality of plant discharge water; and individual chemicals used with estimated consumption rates. Describe the treatment and/or disposal of discharge waters resulting from periodic cleaning of the equipment.
- 13 Describe the proposed methods to dispose of solid wastes and sludge produced by the combustion of fuels as well as normal O&M of the Facility.
- 14 In the case of PV solar generation, describe the proposed method for panel cleaning.
- 15 Describe provisions for diminishing the probability of fires and contamination of the environment during the handling and storage of the ULSD and Natural Gas including spill prevention control. Describe the proposed methods to measure the Fuel and its calorific content. All calorific content is to be expressed in HHV.
- 16 Describe how the auxiliary power will be obtained when plant is disconnected from the 115 kV system.
- 17 Provide design values for seismic, wind and any other data (Refer to paragraphs 6.4 and 6.5 of Section C).
- 18 Provide/the following data for new and clean conditions at 100% load:
 - a) Total combustion turbine or reciprocating engine inlet pressure drop, in H₂O _____
 - b) Exhaust gas temperature, °F _____
- 19 Describe all material interfaces of Facility.

8.10 Environmental Data

Answer the questions below or attach a detailed environmental impact study that includes answers to at least the following questions:

- 1 Describe the technology to be used to maintain air emissions and air pollution within the specified guidelines.
- 2 Describe control devices (if applicable), and proposed monitoring systems and procedures.
- 3 Provide information concerning the containment measures planned for the Project's Fuel and hazardous substances handling and storage areas.

- 4 Address the following issues as they relate to design and construction of the Project.
- 5 Describe the proposed timetable to carry out the environmental impact studies and obtain environmental permits, if you are selected as the Selected Bidder. Indicate the scope of the environmental impact studies and the methodology to be used to perform these studies and to present findings and recommendations. State the commitment of the Bidder to carry out all suggestions and recommendations of the studies related to environmental permits, including possible design modifications.
- 6 Threatened and endangered species assessment and mitigation.
- 7 Cultural and archeological impact (natural, national and state landmarks, historical status and other historical landmarks, graveyards, burial ground proximity to nearby parks and other recreational areas).
- 8 Noise impact analysis and mitigation; please describe technology to be employed or actions to be taken to reduce noise. Provide the guaranteed maximum sound levels for the Facility at all of the Facility boundaries and at any Facility interfaces with other entities including residential, industrial and others. Provide the guaranteed sound level for the plant at one meter from the equipment enclosures or exterior walls of the powerhouse(s), which should not exceed 85 dB(A). The measurement shall not include the existing background noise.
- 9 Indicate the height of the proposed exhaust stack(s) for the Facility and indicate reasons for this selection (could include "Prudent Utility Practices", dispersion of pollutants, height of other exhaust stacks in the immediate vicinity, etc.). Why does Bidder feel this height is adequate from an environmental standpoint? Indicate if this height selection could be changed by the environmental impact study and environmental permits requirements.
- 10 Land use impact mitigation techniques, including the effect on nearby inhabited and tourist areas.
- 11 Describe the architectural style, exterior materials and exterior color schemes proposed for all plant buildings. Provide samples of proposed exterior colors.
- 12 Hazardous waste - type generated and disposal.
- 13 Solid waste - type generated and disposal.

8.10.1 Air Emissions

With regard to projected air emissions, please fill out the following table for the Facility when fired with the Fuels specified.

Table 8.1: ULSD Air Emission Levels

Pollutant	Percent Removal Efficiency at 100% Capacity	Emission Quantity		
		At 100% Capacity	At 50% Capacity	At Minimum Capacity
NO _x		ppmv	ppmv	ppmv
		lb/hr	lb/hr	lb/hr
		lb/MMbtu	lb/MMbtu	lb/MMbtu
		mg/m ³	mg/m ³	mg/m ³
CO		ppmv	ppmv	ppmv
		lb/hr	lb/hr	lb/hr
		lb/MMbtu	lb/MMbtu	lb/MMbtu
		mg/m ³	mg/m ³	mg/m ³
SO ₂		ppmv	ppmv	ppmv
		lb/hr	lb/hr	lb/hr
		lb/MMbtu	lb/MMbtu	lb/MMbtu
		mg/m ³	mg/m ³	mg/m ³
Particulates		ppmv	ppmv	ppmv
		lb/hr	lb/hr	lb/hr
		lb/MMbtu	lb/MMbtu	lb/MMbtu
		mg/m ³	mg/m ³	mg/m ³
VOC		ppmv	ppmv	ppmv
		lb/hr	lb/hr	lb/hr
		lb/MMbtu	lb/MMbtu	lb/MMbtu
		mg/m ³	mg/m ³	mg/m ³

Table 8.2: Natural Gas Air Emission Levels

Pollutant	Percent Removal Efficiency at 100% Capacity	Emission Quantity		
		At 100% Capacity	At 50% Capacity	At Minimum Capacity
NO _x		ppmv	ppmv	ppmv
		lb/hr	lb/hr	lb/hr
		lb/MMbtu	lb/MMbtu	lb/MMbtu

Pollutant	Percent Removal Efficiency at 100% Capacity	Emission Quantity		
		At 100% Capacity	At 50% Capacity	At Minimum Capacity
		mg/m ³	mg/m ³	mg/m ³
CO		ppmv	ppmv	ppmv
		lb/hr	lb/hr	lb/hr
		lb/MMbtu	lb/MMbtu	lb/MMbtu
		mg/m ³	mg/m ³	mg/m ³
SO ₂		ppmv	ppmv	ppmv
		lb/hr	lb/hr	lb/hr
		lb/MMbtu	lb/MMbtu	lb/MMbtu
		mg/m ³	mg/m ³	mg/m ³
Particulates		ppmv	ppmv	ppmv
		lb/hr	lb/hr	lb/hr
		lb/MMbtu	lb/MMbtu	lb/MMbtu
		mg/m ³	mg/m ³	mg/m ³
VOC		ppmv	ppmv	ppmv
		lb/hr	lb/hr	lb/hr
		lb/MMbtu	lb/MMbtu	lb/MMbtu
		mg/m ³	mg/m ³	mg/m ³

Notes:

- 1 Capacity is defined as the total gross capacity of one Unit as commissioned.
- 2 ppmv is defined as volumetric parts per million at 15% O₂.
- 3 lb/hr is defined as pounds per hour.
- 4 lb/MMBtu is defined as pounds per Million Btus of heat input.
- 5 gr/scf is defined as grains per standard cubic foot

Provide total emissions for all air toxics on an aggregate basis, not on an individual basis. Air toxic pollutants are described on the US EPA Web page: <http://www.epa.gov/ttn/atw/allabout.html>.

8.11 Electric Interconnection Data

8.11.1 Items to Be Provided

- 1 A detailed single-line diagram from the generators and proposed interconnection to the 115 kV GPA transmission system. Identify the Point(s) of Delivery.
- 2 Equipment descriptions and functional specifications of:
 - a) Generators, transformers, switchgear equipment, circuit breakers, etc.
 - b) Protective relays, current transformers, voltage transformers, etc.
 - c) Metering System
 - d) Telecommunication equipment
 - e) Control and data acquisition system

Any design changes which may affect the interconnection must be reviewed and approved by GPA. This approval does not relieve the Project Company from any contractual responsibility.

8.12 Performance Data

- 1 Provide a heat rate curve for each Unit in the Facility, assuming that the load will be allocated to each Unit in proportion to its maximum output power level.
- 2 The Bidder shall also tabulate the heat rates (HHV) corresponding to the percentages of the output power levels stated in Table 8.3 through Table 8.6 below. The Unit heat rate for the purpose of Table 8.3 and Table 8.4 is defined as the Fuel energy consumption expressed in Btu (higher heating value) required to generate one kWh at the generator terminals (Unit gross heat rate). This data is for technical evaluation purposes only and will not be used for economic evaluation.
- 3 Provide data on the overall performance of the Facility

**Table 8.3: Unit ULSD Heat Rates
(Combustion Turbine in Simple Cycle or Reciprocating Engine)**

Power Levels - %	Heat Rate (HHV) MBtu/kWh*
100	
85	
65	
50	
25	
10	
Minimum load	

**Table 8.4: Unit Natural Gas Heat Rates
(Combustion Turbine in Simple Cycle or Reciprocating Engine)**

Power Levels - %	Heat Rate (HHV) MBtu/kWh*
100	
85	
65	
50	
25	
10	
Minimum load	

* Measured at generator terminals.

Table 8.5: Facility ULSD Heat Rates

Power Levels - %	Heat Rate (HHV) MBtu/kWh**
100	
85	
65	
50	
25	
10	
Minimum load	

Table 8.6: Facility Natural Gas Heat Rates

Power Levels - %	Heat Rate (HHV) MBtu/kWh**
100	
85	
65	
50	
25	
10	
Minimum load	

** Measured at the Delivery Point.

Table 8.7: Facility ULSD Performance

Description	Units	Value*
Plant Gross Output	kW	*
Auxiliary Power + Losses	kW	*
Step-up Transformer Losses	kW	*
Total Losses	kW	*
Net Power Output at Delivery Point **	kW	**
Heat Rate (based on HHV)**	Btu/kWh	**
Noise Level **	db(A) @ Facility boundary	**
	Equipment db(A) @ 3 feet	**
Particulate emissions **	ppmv	**
NO _x Emissions for @ 15% O ₂ **	ppmv	**
SO ₂ Emissions@ 15% O ₂ **	ppmv	**
VOC Emissions@ 15% O ₂ **	ppmv	**

* The Bidder shall fill-in data.

** The Bidder shall guarantee these values.

Table 8.8: Facility Natural Gas Performance

Description	Units	Value*
Plant Gross Output	kW	*
Auxiliary Power + Losses	kW	*
Step-up Transformer Losses	kW	*
Total Losses	kW	*
Net Power Output at Delivery Point **	kW	**
Heat Rate (based on HHV)**	Btu/kWh	**
Noise Level **	db(A) @ Facility boundary	**
	Equipment db(A) @ 3 feet	**
Particulate emissions **	ppmv	**
NO _x Emissions for @ 15% O ₂ **	ppmv	**
SO ₂ Emissions@ 15% O ₂ **	ppmv	**
VOC Emissions@ 15% O ₂ **	ppmv	**

* The Bidder shall fill-in data.

** The Bidder shall guarantee these values.

8.13 Technology and Design Data

8.13.1 Technical Maturity:

Table 8.9: Similar Technology Experience

Quantity (of all that apply)	Criterion
	One or more similar facility(ies) has (have) achieved an annual equivalent availability equal to or greater than 85% over three consecutive years during commercial operation.
	One or more similar facility(ies) is(are) currently in commercial operation.
	One or more similar facility(ies) is(are) under construction.
	None of the above.

For each of the facilities referenced above, fill out a copy of the form below which describes operating history and statistics.

Table 8.10: Similar Technology Experience

Project Name			
Location			
Contact at Plant			
Name			
Phone Number			
Plant Owner			
Name			
Phone Number			
Power Purchaser			
Name			
Phone Number			
*The Project Came On-line in XXXX.			
Year of Operation:	XXXX	XXXX	XXXX
Operational Months that Year:			
Annual Equivalent Availability			

8.14 Operations and Maintenance Data

8.14.1 Operating Characteristics

Table 8.11: Net Generation Levels

Parameter	Value	Units
a) Maximum emergency level: capacity that may be available during system declared emergencies		MW (net)
		hours available
b) Minimum emergency level: used during system declared emergencies		MW (net)
		hours available
c) Net capability: the maximum level that the Facility could be dispatched during normal system conditions		MW (net)
d) Interim operating level: the operating level at which the Facility operates most efficiently (i.e., at the lowest heat rate)		MW (net)
e) Minimum operating level: the minimum level that the Facility could be dispatched during normal system conditions (i.e., the must-run level)		MW (net)

* The Bidder shall fill-in Data.

8.14.2 Operating Parameters

Provide the operating parameters of the Facility measured in minutes in Table 8.12.

Table 8.12: Synchronizing and Load Pick-up Times

Action	Minutes to Achieve Action After Shutdown:	
	Warm Engine	Cold Engine

Reciprocating Engine Generator			
Synchronized (min)	*	*	
Normal Ramp Rate (MW/min)	*	*	
Emergency Ramp Rate (MW/min)	*	*	
Reciprocating Engine Facility at Full Load	*	*	
Combustion Turbine Generator			
	Hot Start	Warm Start	Cold Start
Synchronized (min)	*	*	*
Normal Ramp Rate (MW/min)	*	*	*
Emergency Ramp Rate (MW/min)	*	*	*
Combustion Turbine Facility at Full Load	*	*	*

* The Bidder shall fill-in Data.

- 1 Describe the Automatic Generation Control capability of the Facility. Describe how the control will allocate the dispatch orders of increasing or decreasing the generation level.
- 2 Describe quick start capability.

8.14.2.1 Equivalent Hours of Start-up.

One normal start-up is equivalent to _____ hours of operation.

One emergency start-up is equivalent to _____ hours of operation.

One hour of peak load is equivalent to _____ hours of operation.

8.14.3 Maintenance

Table 8.13: Annual Maintenance Outage Schedule Combustion Turbine Generator (ULSD)

Duration (number of days):	
Time of Year (season):	
Cycle (number of operating hours):	

Table 8.14: Annual Maintenance Outage Schedule Combustion Turbine Generator (Natural Gas)

Duration (number of days):	
Time of Year (season):	
Cycle (number of operating hours):	

Table 8.15: Annual Maintenance Outage Schedule Reciprocating Generator (ULSD)

Duration (number of days):	
----------------------------	--

Time of Year (season):	
Cycle (number of operating hours):	

Table 8.16: Annual Maintenance Outage Schedule Reciprocating Generator (Natural Gas)

Duration (number of days):	
Time of Year (season):	
Cycle (number of operating hours):	

Note: As a requirement of this solicitation, Bidders must agree to schedule maintenance and planned outages with GPA and accommodate any reasonable request for revisions required by GPA.

Table 8.17: Annual Availability of the Facility

Parameters	Value, %
Annual Availability (Guarantee)*	
Maintenance Outages	
Scheduled Outages	
Forced Outages (Guarantee)*	
Total:	
* The Bidder shall guarantee these values.	

8.14.4 Operations and Maintenance Staff and Services

Attach the following data clearly labeled. Individual data should be numbered to correspond to the question they are addressing; e.g., data submitted in response to Question 8.14.4 Item 1 should be labeled "Form 8, Article 14.4.1".

- 1 Operator's experience with Facility technology - provide number of unit-years of experience with generating facilities of the same or similar technology and size as the Facility.
- 2 Provide the plan for operational staffing including, but not limited to, the number, type and responsibilities of operations personnel on each shift.
- 3 Provide plan of maintenance staffing including, but not limited to, the number of permanent on-site maintenance personnel and their responsibilities; the personnel available for emergency maintenance and their response times; and the personnel that will be utilized for minor and major scheduled maintenance. If contracted, specify contractor, location and experience with this type of equipment.
- 4 Describe briefly the procedure that will be followed for daily, weekly, monthly and yearly maintenance programs.
- 5 Provide outline plans for initial and ongoing training of all plant and support personnel, including any qualifications programs.

- 6 Provide a brief description of plans for the purchasing and warehousing of tools, parts and supplies.
- 7 Provide a major maintenance schedule.

9 FORM 9 – ADDITIONAL SUPPORTING DATA

1 Bidder shall provide the following information for each participant in the Consortium comprising the Bidder.

- Name and address of each member of the Consortium, starting with the designated Lead Bidder.
- Legal status of each member (i.e. corporation, association, individual).
- Country of registration and home office.
- Name of authorized representative for this project and contact information (i.e. address, telephone and Fax numbers, etc.).
- Percentage of equity contribution by each member. If percentage of voting rights is different than the percentage of equity contribution, please also provide details on allocation of voting rights.

2 Provide to the extent possible, the name of organizations and project managers who will provide the services listed below, along with their relevant experience and qualifications. (Any standard printed material may be included as an attachment.)

- Financial advisor/ arranger
- Legal advisors, local and foreign
- Turnkey construction contractor
- Operation and maintenance contractor
- Detailed engineering for Project
- Environmental consultant
- Engineer for the Project Company (Owner's engineer)
- Insurance advisor

3 Provide an outline description of the insurance coverage including company name, to be put into effect by Bidder/Project Company during the Term, including the amounts for which insurance will be purchased and name the potential insurers.

4 Bidder shall provide a listing of the following Project Information:

- A listing of proposed subcontracts for the major elements of the Project; to include subcontractors' name, address, scope of supply or services, and amount of subcontract.

10 FORM 10 – EXCEPTIONS TO THE IFMSB DOCUMENT

Bidders are advised that any material modification to documents may result in disqualification. If there are no exceptions, please state so for each document.

- 1 List Exceptions to the IFMSB
 - a) Section A – Information for Bidders
 - b) Section B - Instructions to Bidders
 - c) Section C - Functional Specifications
 - d) Section D – Bidder's Proposal Forms and Supportive Data
- 2 List exceptions to the draft Project Agreements, individually.
 - a) Exceptions to the Energy Conversion Agreement
 - b) Exceptions to the Land Lease Agreement
 - c) Exceptions to the Water Supply Agreement.

11 FORM 11 – BIDDER’S PROJECT SCHEDULE

Bidder shall provide its detailed Bidder's Project Schedule which supports and confirms the construction phase of the Project Milestone Schedule contained in Section A, Article 11, starting from the signing of the ECA.

- Bidder's Project Schedule shall be submitted in a CPM network format which shall address all the milestones in the referenced Article and those additional milestones shown in 11.1 below for financing, engineering, procurement, shipping, construction activities, etc. necessary to demonstrate a complete and accurate knowledge of the Project, as well as his knowledge of procedures and prevailing conditions in Guam.
- The Bidder's Project Schedule shall address all details of the Project financing, engineering, procurement and construction of the Facility, which as a minimum include the following:

11.1 Bidder's Milestone Schedule

By completing the Milestone Schedule below assuming execution of the ECA, WSA and LLA by [TBD], provide a milestone schedule which will result in a Commercial Operation Date on or prior to [TBD]. For all milestones specify the day, month and year for commencing and completing the milestone. Any item not applicable to the Project must be so marked with a brief explanation as to why it is not applicable. This list is not intended to be inclusive, but rather to include appropriate milestones to allow GPA to evaluate proposals. It is the Bidder's sole responsibility to identify and complete all the appropriate milestones necessary for the completion of its Project whether included here or not. This includes the identification and acquisition of all necessary permits.

(Bidder to include its CPM Project Schedule as back-up to Milestone Schedule below)

Table 11.1: Milestone Schedule

Milestone	Start Date	Completion Date
Financing		
• Construction & permanent financial closing		
Engineering		
• Preliminary		
• Detailed		
Solicitation & award of proposals for major equipment		
• Equipment procurement		
• Prime Mover(s)		
• Boilers(s) Contract (if applicable)		
• Electrical equipment procurement		
• Cooling equipment procurement		
• _____ (other)		
Permits		
• Local site plan approval		

Milestone	Start Date	Completion Date
• Local building permits		
• Other)		
Environmental permits		
• Air permits		
• Water permits		
• Other environmental permits		
• Solid Waste		
• _____ (Other) (Any other applicable permit(s), not listed above)		
Construction		
On-site construction activities		
• Foundation		
• Electric interconnection		
• Major equipment installation		
• Fuel Receiving Facilities		
• (other)		
Off-site construction activities		
• Electrical Interconnection Facilities		
• ULSD Supply Infrastructure		
Operation		
• Phase 1 Startup and Commissioning		
• Phase 1 Commercial Operation		
• Phase 2 Start-up and Commissioning		
• Phase 2 Commercial Operation		

12 FORM 12 – BIDDER’S STAFFING PLAN

12.1 BIDDER’S PROPOSED HOME OFFICE (OFF-SHORE) ORGANIZATION

The Bidder shall submit a detailed organization chart showing its home office management organization (off-shore) and its interface with the Project Site in Guam (on-shore) organization. This organization chart shall designate the authorized representative(s) and key personnel. Personnel not specifically designated to the Project will be so identified on the organization chart. The chart shall be supplemented by a narrative outline which indicates the duties, the functional responsibilities, and the designated authority of each member of the home office organization. Bidder's key personnel and Bidder's authorized representative(s) shall include but not be limited to the following:

- a) Overall Project Management
- b) Home Office Manager
- c) Responsible Officer/Director
- d) Engineering Functions
- e) Procurement, Traffic and Vendor Surveillance
- f) Construction Management
- g) Planning and Scheduling
- h) Quality Program Management
- i) Accounting
- j) Production Manager

12.2 BIDDER’S PROPOSED SITE (ON-SHORE) ORGANIZATION

The Bidder shall submit a detailed organization chart showing its proposed Site (on-shore) organization, which will be responsible for the execution of the Works. All authorized Contractor Representative(s) and Contract Key Personnel shall be so designated on the organization chart. Specifically, the Bidder's organization chart must indicate the key personnel who will be responsible for performing the following functions:

- a) Project Management
- b) Engineering Functions
- c) Procurement of materials; traffic and logistics
- d) Supervision of Construction and Construction Management
- e) Health and Safety Management
- f) Environmental Compliance Management
- g) Community Relations Management
- h) Planning and Scheduling
- i) Accounting and Commercial Functions

This chart shall be supplemented by a narrative outline that indicates the duties, the functional responsibilities and designated authority of each member designated on Bidder's Site organization chart.

**13 FORM 13 – MANDATORY FORMS REQUIRED IN ACCORDANCE
WITH GUAM PROCUREMENT LAW**

13.1 Major Shareholder Disclosure Affidavit



GUAM POWER AUTHORITY

ATURIDAT ILEKTRESEDAT GUAHAN
P O BOX 2977, AGANA, GUAM 96932-2977

SPECIAL PROVISION FOR MAJOR SHAREHOLDERS DISCLOSURE AFFIDAVIT

All Bidders/Offerors are required to submit a current affidavit as required below. Failure to do so will mean disqualification and rejection of the bid/rfp.

5 GCA §5233 (Title 5, Section 5233) states:

"Section 5233 Disclosure of Major Shareholders. As a condition of submitting a bid or offer, any partnership, sole proprietorship or corporation doing business with the government of Guam shall submit an affidavit executed under oath that lists the name and address of any person who has held more than ten percent (10%) of the outstanding interest or shares in said partnership, sole proprietorship or corporation at any time during the twelve (12) month period immediately preceding submission of a bid, or, that it is a not for profit organization that qualifies for tax exemption under the Internal Revenue Code of the United States or the Business Privilege Tax law of Guam, Title 12, Guam Code Annotated, Section 26203©. With the exception of not for profit organizations, the affidavit shall contain the number of shares or the percentage of all assets of such partnership, sole proprietorship or corporation which have held by each such person during the twelve (12) month period. In addition, the affidavit shall contain the name and address of any person who has received or is entitled to receive a commission, gratuity or other compensation for procuring or assisting in obtaining business related to the bid or offer and shall also contain the amounts of any such commission, gratuity or other compensation. The affidavit shall be open and available to the public for inspection and copying."

- 1. If the affidavit is a copy, indicate the BID/RFP number and where it is filed.**
- 2. Affidavits must be signed within 60 days of the date the bids or proposals are due.**

MAJOR SHAREHOLDERS OF DISCLOSURE AFFIDAVIT

TERRITORY OF GUAM)
)
 HAGATNA, GUAM)

I, undersign, _____,
 (partner or officer of the company of, etc.)
 being first duly sworn, deposes and says:

1. That the person who have held more than ten percent (10%) of the company's shares during the past twelve (12) months are as follows:

<u>Name</u>	<u>Address</u>	<u>Percentage of Shares Held</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
Total number of shares		_____

2. Persons who have received or are entitled a commission, gratuity or other compensation for procuring or assisting in obtaining business related to the bid/rfp for which this Affidavit is submitted are as follows:

<u>Name</u>	<u>Address</u>	<u>Compensation</u>
_____	_____	_____
_____	_____	_____

Further, affiant sayeth naught.

Date: _____

 Signature of individual if bidder/offeror is a sole Proprietorship; Partner, if the bidder/offeror is a Partnership Officer, if the bidder/offeror is a corporation.

Subscribe and sworn to before me this _____ day of _____,

20_____.

Notary Public _____

In and for the Territory of Guam

My Commission expires _____.

13.2 Non-Collusion Affidavit

NON-COLLUSION AFFIDAVIT

Guam)
)ss:
Hagatna)

I, _____ first being duly sworn, depose and say:
(Name of Declarant)

1. That I am the _____ of _____.
(Title) (Name of Bidding/RFP Company)
2. That in making the foregoing proposal or bid, that such proposal or bid is Genuine and not collusive or sham, that said bidder/offeror has not colluded, Conspired, connived or agreed, directly or indirectly, with any bidder or person, to put in a sham or to refrain from bidding or submitting a proposal and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid of affiant or any other bidder, or to secure any overhead, project or cost element of said bid price, or of that of any bidder, or to secure any advantage against the GUAM POWER AUTHORITY or any person interested in the proposed contract; and
3. That all statements in said proposal or bid are true.
4. This affidavit is made in compliance with Guam Administrative Rules and Regulations §§3126(b).

(Declarant)

SUBSCRIBED AND SWORN to me before this _____ day of _____, 2018.

)Seal(

Notary Public

13.3 No Gratuities or Kickbacks Affidavit

NO GRATUITIES OR KICKBACKS AFFIDAVIT

AFFIDAVIT

(Offeror)

TERRITORY OF GUAM)
)
HAGATNA, GUAM)

SS:

_____, being first duly sworn, deposes and says:
As the duly authorized representative of the Offeror, that neither I nor of the Offeror's officers, representatives, agents, subcontractors, or employees has or have offered, given or agreed to give any government of Guam employee or former employee, any payment, gift, kickback, gratuity or offer of employment in connection with Offeror's proposal.

Signature of Individual if Proposer is a Sole Proprietorship;
Partner, if the Proposer is a Partnership;
Officer, if the Proposer is a Corporation

SUBSCRIBED AND SWORN to before me this ____ day of _____, 2018.

Notary Public
In and for the Territory of Guam
My Commission Expires:

13.4 Ethical Standards Affidavit

ETHICAL STANDARDS AFFIDAVIT

AFFIDAVIT

(Proposer)

TERRITORY OF GUAM)

) **SS:**

HAGATNA, GUAM)

_____, being first duly sworn, deposes and says:

That I am (the Sole Proprietor, a Partner or Officer of the Offeror)

That Offeror making the foregoing Proposal, that neither he or nor of the Offeror's officers, representatives, agents, subcontractors, or employees of the Offeror have knowingly influenced any government of Guam employee to breach any of the ethical standards set forth in 5 GCA Chapter 5 Article 11, and promises that neither he nor any officer, representative, agent, subcontractor, or employee of Offeror will knowingly influence any government of Guam employee to breach any ethical standard set for in 5 GCA Chapter 5 Article 11.

Signature of Individual if Proposer is a Sole Proprietorship;
Partner, if the Proposer is a Partnership;
Officer, if the Proposer is a Corporation

SUBSCRIBED AND SWORN to before me this ____ day of _____, 2018.

Notary Public
In and for the Territory of Guam
My Commission Expires:

13.5 Declaration Re-Compliance with U.S. DOL Wage Determination

DECLARATION RE-COMPLIANCE WITH U.S. DOL WAGE DETERMINATION

Procurement No.: _____

Name of Offeror Company: _____

_____ hereby certifies under penalty of perjury:

- (1) That I am _____ (the offeror, a partner of the offeror, an officer of the offeror) making the bid or proposal in the foregoing identified procurement;
- (2) That I have read and understand the provisions of 5 GCA § 5801 and § 5802 which read:

§ 5801. Wage Determination Established.

In such cases where the government of Guam enters into contractual arrangements with a sole proprietorship, a partnership or a corporation ('contractor') for the provision of a service to the government of Guam, and in such cases where the contractor employs a person(s) whose purpose, in whole or in part, is the direct delivery of service contracted by the government of Guam, then the contractor shall pay such employee(s) in accordance with the Wage Determination for Guam and the Northern Mariana Islands issued and promulgated by the U.S. Department of Labor for such labor as is employed in the direct delivery of contract deliverables to the government of Guam.

The Wage Determination most recently issued by the U.S. Department of Labor at the time a contract is awarded to a contractor by the government of Guam shall be used to determine wages, which shall be paid to employees pursuant to this Article. Should any contract contain a renewal clause, then at the time of renewal adjustments, there shall be made stipulations contained in that contract for applying the Wage Determination, as required by this Article, so that the Wage Determination promulgated by the U.S. Department of Labor on a date most recent to the renewal date shall apply.

§ 5802. Benefits.

In addition to the Wage Determination detailed in this Article, any contract to which this Article applies shall also contain provisions mandating health and similar benefits for employees covered by this Article, such benefits having a minimum value as detailed in the Wage Determination issued and promulgated by the U.S. Department of Labor, and shall contain provisions guaranteeing a minimum of ten (10) paid holidays per annum per employee.

(3) That the offeror is in full compliance with 5 GCA § 5801 and § 5802, as may be applicable to the procurement referenced herein;

Signature of Individual if Proposer is a Sole Proprietorship;
Partner, if the Proposer is a Partnership;
Officer, if the Proposer is a Corporation

SUBSCRIBED AND SWORN to before me this ____ day of _____, 2018.

Notary Public
In and for the Territory of Guam
My Commission Expires:

13.6 Special Provisions

SPECIAL PROVISIONS

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

GCA 5 §5253 Restriction Against Contractors Employing Convicted Sex Offenders from Working at Government of Guam Venues:

- (a) No person convicted of a sex offense under the provisions of Chapter 25 of Title 9 Guam Code Annotated, or an offense as defined in Article 2 of Chapter 28, Title 9 GCA in Guam, or an offense in any jurisdiction which includes, at a minimum, all of the elements of said offenses, or who is listed on the Sex Offender Registry, and who is employed by a business contracted to perform services for an agency or instrumentality of the government of Guam, shall work for his employer on the property of the Government of Guam other than public highway.
- (b) All contracts for services to agencies listed herein shall include the following provisions: (1) warranties that no person providing services on behalf of the contractor has been convicted of a sex offense under the provisions of Chapter 25 of Title 9 GCA or an offense as defined in Article 2 of Chapter 28, Title 9 GCA, or an offense in another jurisdiction with, at a minimum, the same elements as such offenses, or who is listed on the Sex Offender Registry; and (2) that if any person providing services on behalf of the contractor is convicted of a sex offense under the provisions of Chapter 25 of Title 9 GCA or an offense as defined in Article 2 of Chapter 28, Title 9 GCA or an offense in another jurisdiction with, at a minimum, the same elements as such offenses, or who is listed on the Sex Offender Registry, that such person will be immediately removed from working at said agency and that the administrator of said agency be informed of such within twenty-four (24) hours of such conviction.
- (c) Duties of the General Services Agency or Procurement Administrators. All contracts, bids, or Requests for Proposals shall state all the conditions in § 5253(b).
- (d) Any contractor found in violation of § 5253(b), after notice from the contracting authority of such violation, shall, within twenty-four (24) hours, take corrective action and shall report such action to the contracting authority. Failure to take corrective action within the stipulated period may result in the temporary suspension of the contract at the discretion of the contracting authority.

SOURCE: Added by P.L. 28-024:2 ((Apr. 21, 2005). Amended by P.L. 28-098:2 (Feb. 7, 2006).

Signature of Bidder Date
Proposer, if an individual;
Partner, if a partnership;
Officer, if a corporation.

Subscribed and sworn before me this _____ day of _____, 2018.

Notary Public

13.7 Local Procurement Preference Application



GUAM POWER AUTHORITY

ATURIDÁT ILEKTRESEDÁT GUAHAN

P.O. BOX 2977 HAGÁTÑA, GUAM U.S.A. 96932-2977

Edward J.B. Calvo
Governor

Telephone Nos. (671) 648-3054/55 Fax: 648-3165

Raymond S. Tenorio
Lieutenant Governor

Accountability · Impartiality · Competence · Openness · Value

LOCAL PROCUREMENT PREFERENCE APPLICATION

Based on the law stipulated below, please place a checkmark or an "X" on the block indicating the item that applies to your business:

5GCA, Chapter 5, Section 5008, "Policy in Favor of Local Procurement" of the Guam Procurement Law states:

All procurement of supplies and services shall be made from among businesses licensed to do business on Guam and that maintains an office or other facility on Guam, whenever a business that is willing to be a contractor is:

- () (a) A licensed bonafide manufacturing business that adds at least twenty-five percent (25%) of the value of an item, not to include administrative overhead, suing workers who are U.S. Citizens or lawfully admitted permanent residents or nationals of the United States, or persons who are lawfully admitted to the United States to work, based on their former citizenship in the Trust Territory for the Pacific Islands; or
- () (b) A business that regularly carries an inventory for regular immediate sale of at least fifty percent (50%) of the items of supplies to be procured; or
- () (c) A business that has a bonafide retail or wholesale business location that regularly carries an inventory on Guam of a value of at least one half of the value of the bid or One Hundred Fifty Thousand Dollars (\$150,000.0) whichever is less, of supplies and items of a similar nature to those being sought; or
- () *(d) A service actually in business, doing a substantial business on Guam, and hiring at least 95% U.S. Citizens, lawfully admitted permanent residents or national of the United States, or persons who lawfully admitted to the United States to work, based on their citizenship in any of the nations previously comprising the Trust Territory of the Pacific Islands.

Bidders indicating qualification under (d) may be considered QUALIFIED for the Local Procurement Preference **only if** the Government's requirement is for service. Service is defined Pursuant to 5 GCA Government Operations Subparagraph 5030 entitled DEFINITIONS under Chapter 5 of the Guam Procurement Law.

1. I _____, representative for _____,

have read the requirements of the law cited above and do hereby qualify and elect to be given the LOCAL PROCUREMENT PREFERENCE for Bid No.: GPA _____.

By filling in this information and placing my signature below, I understand that the Guam Power Authority will review this application and provide me with a determination whether or not the 15% preference will be applied to this bid.

2. I _____, representative for _____,

have read the requirements of the law cited above, and do not wish to apply for the Local Procurement Preference for Bid No.: GPA _____.

Bidder Representative Signature

Date

NOTE:

Prospective Bidders not completing this form will automatically be not considered for Local Procurement Preference. Non-completion of this form is not a basis for rejection of the bid or proposal.

13.8 Government of Guam General Terms and Conditions

**GOVERNMENT OF GUAM
GENERAL TERMS AND CONDITIONS
SEALED BID SOLICITATION AND AWARD**

Only those Boxes checked below are applicable to this bid.

1. **AUTHORITY:** This solicitation is issued subject to all the provision of the Guam Procurement Act (5GCA,

Chapter 5) And the Guam Procurement Regulations (copies of both are available at the Office of the Complier of laws, Department of Law, copies available for inspection at the Guam Power Authority). It requires all parties involved in the Preparation, negotiation, performance, or administration of contracts to act in good faith.

2. **GENERAL INTENTION:** Unless otherwise specified, it is the declared and acknowledged intention and meaning of these General Terms and conditions for the bidder to provide the Government of Guam (Government) with specified services or with materials, supplies or equipment completely assembled and ready for use.

3. **TAXES:** Bidders are cautioned that they are subject to Guam Income Taxes as well as all other taxes on Guam Transactions. Specific information on taxes may be obtained from the Director of Revenue and Taxation.

4. **LICENSING:** Bidders are cautioned that the Government will not consider for award any offer submitted by a bidder who has not complied with the Guam Licensing Law. Specific information on licenses may be obtained from the Director of Revenue and Taxation.

5. **LOCAL PROCUREMENT PREFERENCE:** All procurement of supplies and services where possible, will be made from among businesses licensed to do business on Guam in accordance with section 5008 of the Guam Procurement Act (5GCA, Chapter 5) and Section 1-104 of the Guam Procurement Regulations.

6. **COMPLIANCE WITH SPECIFICATIONS AND OTHER SOLICITATION REQUIREMENTS:** Bidders shall comply with all specifications and other requirements of the Solicitation.

7. **“ALL OR NONE” BIDS:** Unless otherwise allowed under this Solicitation. “all or none” bids may be deemed to be non-responsive. If the bid is so limited, the Government may reject part of such proposal and award on the remainder.

NOTE: By checking this item, the Government is requesting all of the bid items to be bided or none at all. **The Government will not award on an itemized basis.** Reference: Section 3-101.06 of the Guam Procurement Regulations.

8. **INDEPENDENT PRICE DETERMINATION:** The bidder, upon signing the Invitation for Bid, certifies that the prices in his bid were derived at without collusion, and acknowledge that collusion and anti-competitive practices are prohibited by law. Violations will be subject to the provision of Section 5651 of that of the Guam Procurement Act. Other existing civil, criminal or administrative remedies are not impaired and may be in addition to the remedies in Section 5651 of the Government code.

[] 9. **BIDDER'S PRICE:** The Government will consider not more than two (2) (Basic and Alternate) item prices and the bidder shall explain fully each price if supplies, materials, equipment, and/or specified services offered comply with specifications and the products origin. Where basic or alternate bid meets the minimum required specification, cost and other factors will be considered. Failure to explain this requirement will result in rejection of the bid.

[] 10. **BID ENVELOPE:** Envelope shall be sealed and marked with the bidder's name, Bid number, time, date and place of Bid Opening.

[] 11. **BID GUARANTEE REQUIREMENT:** Bidder is required to submit a Bid Guarantee Bond or standby irrevocable Letter of Credit or Certified Check or Cashier's Check in the same bid envelope to be held by the Government pending award. The Bid Guarantee Bond, Letter of Credit, Certified Check or Cashier's Check must be issued by any local surety or banking institution licensed to do business on Guam and made payable to the Guam Power Authority in the amount of three million dollars (\$3,000,000.00 USD). The Bid Bond must be submitted on Government Standard Form BB-1 (copy enclosed). Personal Checks will not be accepted as Bid Guarantee. If a successful Bidder (contractor) withdraws from the bid or fails to enter into contract within the prescribed time, such Bid guarantee will be forfeited to the Government of Guam. Bids will be disqualified if not accompanied by Bid Bond, Letter of Credit, Certified Check or Cashier's check. Bidder must include in his/her bid, valid copies of a Power of Attorney from the Surety and a Certificate of Authority from the Government of Guam to show proof that the surety company named on the bond instrument is authorized by the Government of Guam and qualified to do business on Guam. For detailed information on bonding matters, contact the Department of Revenue and Taxation. Failure to submit a valid Power of Attorney and Certificate of Authority on the surety is cause for rejection of bid. (GPR Section 3-202.03.3) **Pursuant to Public Law 27-127, all competitive sealed bidding for the procurement of supplies or services exceeding \$25,000.00 a 15% Bid Security of the total bid price must accompany the bid package.**

[] 12. **PERFORMANCE BOND REQUIREMENT:** The Bidder may be required to furnish a Performance Bond on Government Standard Form BB-1 or standby irrevocable Letter of Credit or Certified Check or Cashier's Check payable to the Guam Power Authority issued by any of the local Banks or Bonding Institution in the amount of FIFTEEN PERCENT (15%) of the estimated amount of the contract as security for the faithful performance and proper fulfillment of the contract. In the event that any of the provisions of this contract are violated by the contractor, the Chief Procurement Officer shall serve written notice upon both the contractor and the Surety of its intention to terminate the contract. Unless satisfactory arrangement or correction is made within ten (10) days of such notice the contract shall cease and terminate upon the expiration of the ten (10) days. In the event of any such termination, the Chief Procurement Officer shall immediately serve notice thereof upon the Surety. The Surety shall have the right to take over and perform the contract, provided, however, that if the Surety does not commence performance thereof within 10 days from the date of the mailing of notice of termination, the Government may take over and prosecute the same to complete the contract or force account for the account and at the expense of the contractor, and the contractor and his Surety shall be liable to the Government for any excess cost occasioned the Government thereby (GPR Section 3-202.03.4).

[] 13. **PERFORMANCE GUARANTEE:** Bidders who are awarded a contract under this solicitation, guarantee that goods will be delivered or required services performed within the time specified. Failure to perform the contract in a satisfactory manner may be cause for suspension or debarment from doing business with the Government and to enforce Section 23 of these General Terms and Conditions. In addition, the Government will hold the Vendor liable and will enforce the requirements as set forth in Section 41 of these General Terms and Conditions.

[] 14. **SURETY BONDS:** Bid and Performance Bonds coverage must be signed or countersigned in Guam by a foreign or alien surety's resident general agent. The surety must be an Insurance Company, authorized by the government of Guam and qualified to do business in Guam. Bids will be disqualified if the Surety Company does not have a valid Certificate of Authority from the Government of Guam to conduct business in Guam.

[] 15. **COMPETENCY OF BIDDERS:** Bids will be considered only from the such bidders who, in the opinion of the Government, can show evidence of their ability, experience, equipment, and facilities to render satisfactory service.

[] 16. **DETERMINATION OF RESPONSIBILITY OF BIDDERS:** The Chief Procurement Officer reserves the right for securing from bidders information to determine whether or not they are responsible and to inspect plant site, place of business; and supplies and services as necessary to determine their responsibility in accordance with Section 15 of these General Terms and Conditions (GPR Section 3-401).

[] 17. **STANDARD FOR DETERMINATION OF LOWEST RESPONSIBLE BIDDER:** In determining the lowest responsible offer, the Chief Procurement Officer shall be guided by the following:

- a) Price of items offered.
- b) The ability, capacity, and skill of the Bidder to perform.
- c) Whether the Bidder can perform promptly or within the specified time.
- d) The quality of performance of the Bidder with regards to awards previously made to him.
- e) The previous and existing compliance by the Bidder with laws and regulations relative to procurement.
- f) The sufficiency of the financial resources and ability of the Bidder to perform.
- g) The ability of the bidder to provide future maintenance and services for the subject of the award.
- h) The compliance with all of the conditions to the Solicitation.**

[] 18. **TIE BIDS:** If the bids are for the same unit price or total amount in the whole or in part, the Chief Procurement Officer will determine award based on Section 3.202.15.2, or to reject all such bids (GPR Section 3-202.15.2).

[] 19. **BRAND NAMES:** Any reference in the Solicitation to manufacturer's Brand Names and number is due to lack of a satisfactory specification of commodity description. Such preference is intended to be descriptive, but nor restrictive and for the sole purpose of indicating prospective bidders a description of the article or services that will be satisfactory. Bids on comparable items will be considered provided the bidder clearly states in his bid the exact articles he is offering and how it differs from the original specification.

[] 20. **DESCRIPTIVE LITERATURE:** Descriptive literature(s) as specified in this solicitation must be furnished as a part of the bid and must be received at the date and time set for opening Bids. The literature furnished must clearly identify the item(s) in the Bid. The descriptive literature is required to establish, for the purpose of evaluation and award, details of the product(s) the bidder proposes to furnish including design, materials, components, performance characteristics, methods of manufacture, construction, assembly or other characteristics which are considered

appropriate. Rejection of the Bid will be required if the descriptive literature(s) do not show that the product(s) offered conform(s) to the specifications and other requirements of this solicitation. Failure to furnish the descriptive literature(s) by the time specified in the Solicitation will require rejection of the bid.

[] 21. **SAMPLES:** Sample(s) of item(s) as specified in this solicitation must be furnished as a part of the bid and must be received at the date and time set for opening Bids. The sample(s) should represent exactly what the bidder proposes to furnish and will be used to determine if the item(s) offered complies with the specifications. Rejection of the Bid will be required if the sample(s) do not show that the product(s) offered conform(s) to the specifications and other requirements of this solicitation. Failure to furnish the sample(s) by the time specified in the Solicitation will require rejection of the Bid.

[] 22. **LABORATORY TEST:** Successful bidder is required to accompany delivery of his goods with a Laboratory Test Report indicating that the product he is furnishing the Government meets with the specifications. This report is on the bidder's account and must be from a certified Testing Association.

[] 23. **AWARD, CANCELLATION, & REJECTION:** Award shall be made to the lowest responsible and responsive bidder, whose bid is determined to be the most advantageous to the Government, taking into consideration the evaluation factors set forth in this solicitation. No other factors or criteria shall be used in the evaluation. The right is reserved as the interest of the Government may require to waive any minor irregularity in bid received. The Chief Procurement Officer shall have the authority to award, cancel, or reject bids, in whole or in part for any one or more items if he determines it is in the public interest. Award issued to the lowest responsible bidder within the specified time for acceptance as indicated in the solicitation, results in a bidding contract without further action by either party. In case of an error in the extension of prices, unit price will govern. It is the policy of the Government to award contracts to qualified local bidders. The government reserves the right to increase or decrease the quantity of the items for award and make additional awards for the same type items and the vendor agrees to such modifications and additional awards based on the bid prices for a period of thirty (30) days after original award. No award shall be made under this solicitation which shall require advance payment or irrevocable letter of credit from the government (GPR Section 3-202.14.1).

[] 24. **MARKING:** Each outside container shall be marked with the Purchase Order number, item number, brief item description and quantity. Letter marking shall not be less than 3/4" in height.

[] 25. **SCHEDULE FOR DELIVERY:** Successful bidder shall notify the Guam Power Authority, Dededo Warehouse at (671) 653-2073 and/or Guam Power Authority Cabras Warehouse at (671) 475-3319, at least twenty-four (24) hours before delivery of any item under this solicitation.

[] 26. **BILL OF SALE:** Successful supplier shall render Bills of Sale for each item delivered under this contract. Failure to comply with this requirement will result in rejection of delivery. The Bill of Sale must accompany the items delivered but will not be considered as an invoice for payment. Supplier shall bill the Government in accordance with billing instructions as indicated on the Purchase Order.

[] 27. **MANUFACTURER'S CERTIFICATE:** Successful bidder is required, upon delivery of any item under this contract, to furnish a certificate from the manufacturer indication that the goods meet the specifications. Failure to comply with this request will result in rejection of delivery payment. Supplier shall bill the Government in accordance with billing instructions as indicated on the Purchase Order.

[] 28. **INSPECTION:** All supplies, materials, equipment, or services delivered under this contract shall be subject to the inspection and/or test conducted by the Government at destination. If in any case the supplies, materials, equipment, or services are found to be defective in material, workmanship, performance, or otherwise do not conform with the specifications, the Government shall have the right to reject the items or require that they be corrected. The number of days required for correction will be determined by the Government.

[] 29. **MOTOR VEHICLE SAFETY REQUIREMENTS:** The Government will only consider Bids on motor vehicles which comply with the requirements of the National Traffic and Motor Vehicle safety Act of 1966 (Public Law 89-563) and Clean Air Act as amended (Public Law 88-206), that are applicable to Guam. Bidders shall state if the equipment offered comply with these aforementioned Federal Laws.

[] 30. **SAFETY INSPECTION:** All motor vehicles delivered under this contract must pass the Government

of Guam Vehicle Inspection before delivery at destination.

[] 31. **GUARANTEE:**

a) Guarantee of Vehicle Type of Equipment:

The successful bidder shall guarantee vehicular type of equipment offered against defective parts, workmanship, and performance, for a period of not less than one (1) year after date of receipt of equipment. Bidder shall also provide service to the equipment for at least one (1) year. Service to be provided shall include, but will not be limited to tune ups (change of spark plugs, contact points and condensers) and lubrication (change of engine and transmission oil). All parts and labor shall be at the expense of the bidder. All parts found defective and not caused by misuse, negligence or accident within the guarantee period shall be repaired, replaced, or adjusted within six (6) working days after notice from the Government and without cost to the Government. Vehicular type of equipment as used in this context shall include equipment used for transportation as differentiated from tractors, backhoes, etc.

b) Guarantee of Other Type of Equipment:

The successful bidder shall guarantee all other types of equipment offered, except those mentioned in 31a, above, against defective parts, workmanship, and performance for a period of not less than three (3) months after date of receipt of equipment. Bidder shall also provide service to the equipment for at least three (3) months. All parts found defective within that period shall be repaired or replaced by the Contractor without cost to the Government. Repairs, adjustments or replacements of defective parts shall be completed by the contractor within six (6) working days after notice from the Government.

c) Compliance with this Section is a condition of this Bid.

[] 32. **REPRESENTATION REGARDING ETHICS IN PUBLIC PROCUREMENT:** The bidder or contractor represents that it has not knowingly influenced and promises that it will not knowingly influence a Government employee to breach any of the ethical standards and represents that it has not violated, is not violating, and promises that it will not violate the prohibition against gratuities and kickbacks set forth on Chapter 11 (Ethics in Public Contracting) of the Guam Procurement Act and in Chapter 11 of the Guam Procurement Regulations.

[] 33. **REPRESENTATION REGARDING CONTINGENT FEES:** The contractor represents that it has not retained a person to solicit or secure a Government contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies for the purpose of securing business (GPR Section 11-207).

[] 34. **EQUAL EMPLOYMENT OPPORTUNITY:** Contractors shall not discriminate against any employee or applicant of employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that employees are treated equally during employment without regards to their race, color, religion, sex, or national origin.

[] 35. **COMPLIANCE WITH LAWS:** Bidders awarded a contract under this Solicitation shall comply with the applicable standard, provisions, and stipulations of all pertinent Federal and/or local laws, rules, and regulations relative to the performance of this contract and the furnishing of goods.

[] 36. **CHANGE ORDER:** Any order issued relative to awards made under this solicitation will be subject to and in accordance with the provisions of Section 6-101-03.1 of the Guam Procurement Regulations.

[] 37. **STOP WORK ORDER:** Any stop work order issued relative to awards made under this solicitation will be subject to and in accordance with the provisions of Section 6-101-04.1 of the Guam Procurement Regulations.

[] 38. **TERMINATION FOR CONVENIENCE:** Any termination order for the convenience of the Government issued relative towards made under this solicitation will be subject to and in accordance with the provisions of Section 6-101.10 of the Government Procurement Regulations.

[] 39. **TIME FOR COMPLETION:** It is hereby understood and mutually agreed by and between the contractor and the Government that the time for delivery to final destination or the timely performance of certain services is an essential condition of this contract. If the contractor refuses or fails to perform any of the provisions of this contract within the time specified in the Purchase Order (from the date Purchase Order is acknowledged by vendor), then the contractor is in default. Defaults will be treated subject to and in accordance with the provisions of Section 6-101-08 of the Guam Procurement Regulations.

[] 40. **JUSTIFICATION OF DELAY:** Bidders who are awarded contracts under this Solicitation, guarantee that the goods will be delivered to their destination or required services rendered within the time specified. If the bidder is not able to meet the specified delivery date, he is required to notify the Chief Procurement Officer of such delay. Notification shall be in writing and shall be received by the Chief Procurement Officer at least twenty-four (24) hours before the specified delivery date. Notification of delay shall include an explanation of the causes and reasons for the delay including statement(s) from supplier or shipping company causing the delay. The Government reserves the right to reject delay justification if, in the opinion of the Chief Procurement Officer, such justification is not adequate.

[] 41. **LIQUIDATED DAMAGES:** When the contractor is given notice of delay or nonperformance as specified in Paragraph 1 (Default) of the Termination for Default Clause of this contract and fails to cure in the time specified, the contractor shall be liable for damages for delay in the amount of **one thousand dollars (\$1,000.00)** of outstanding order per calendar day from date set for cure until either the territory reasonable obtains similar supplies or services if the contractor is terminated for default, or until the contractor provides the supplies or services if the contractor is not terminated for default. To the extent that the contractor's delay or nonperformance is excused under Paragraph 40 (Excuse for Nonperformance or Delayed Performance) of the

Termination for Default Clause of this contract, liquidated damages shall not be due the territory. The contractor remains liable for damages caused other than by delay (GPR Section 6-101-09.1).

[] 42. **PHYSICAL LIABILITY:** If it becomes necessary for the Vendor, either as principal, agent or employee, to enter upon the premises or property of the Government of Guam in order to construct, erect, inspect, make delivery or remove property hereunder, the Vendor hereby covenants and agrees to take, use, provide and make all proper, necessary and sufficient precautions, safeguards and protections against the occurrence of any accidents, injuries or damages to any person or property during the progress of the work herein covered, and to be responsible for, and to indemnify and save harmless the Government of Guam from the payment of all sums of money by reason of all or any such accidents, injuries or damages that may occur upon or about such work, and fines, penalties and loss incurred for or by reasons of the violations of any territorial ordinance, regulations, or the laws of Guam or the United States, while the work is in progress. Contractor will carry insurance to indemnify the Government of Guam against any claim for loss, damage or injury to property or persons arising out of the performance of the Contractor or his employees and agents of the services covered by the contract and the use, misuse or failure of any equipment used by the contractor or his employees or agents, and shall provide certificates of such insurance to the Government of Guam when required.

[] 43. **CONTACT FOR CONTRACT ADMINISTRATION:** If your firm receives a contract as a result of this Solicitation, please designate a person whom we may contact for prompt administration.

Name: _____ Title: _____

Address: _____ Telephone: _____

13.9 Sealed Bid Solicitation Instructions

GOVERNMENT OF GUAM
SEALED BID SOLICITATION INSTRUCTIONS

- 1 **BID FORMS:** Each bidder shall be provided with two (2) sets of Solicitation forms. Additional copies may be provided upon request. Bidders requesting additional copies of said forms will be charged per page in accordance with Section 6114 of the Government Code of Guam. All payments for this purpose shall be by cash, certified check or money order and shall be made payable to the Guam Power Authority.
- 2 **PREPARATIONS OF BIDS:**
 - a) Bidders are required to examine the drawings, specifications, schedule, and all instructions. Failure to do so will be at bidder's risk.
 - b) Each bidder shall furnish the information required by the Solicitation. The bidder shall sign the solicitation and print or type his name on the Schedule. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent are to be accompanied by evidence of this authority unless such evidence has been previously furnished to the issuing office.
 - c) Unit price for each unit offered shall be shown and such price shall include packing unless otherwise specified. A total shall be entered in the amount column of the Schedule for each item offered. In case of discrepancies between a unit price and extended price, the unit price will be presumed to be correct.
 - d) Bids for supplies or services other than those specified will not be considered. Time, if stated as a number of days, means calendar days and will include Saturdays, Sundays, and holidays beginning the day after the issuance of a Notice to Proceed. Time stated ending on a Saturday, Sunday or Government of Guam legal holiday will end at the close of the next business day.
- 3 **EXPLANATION TO BIDDERS:** Any explanation desired by a bidder regarding the meaning or interpretation of the Solicitation, drawings, specifications, etc., must be submitted in writing and with sufficient time allowed for a written reply to reach all bidders before the submission of their bids. Oral explanations or instructions given before the award of the contract will not be binding. Any information given to a prospective bidder concerning a Solicitation will be furnished to all prospective bidders in writing as an amendment to the Solicitation if such information would be prejudicial to uninformed bidders.
- 4 **ACKNOWLEDGEMENT OF AMENDMENTS TO SOLICITATIONS:** Receipt of an amendment to a Solicitation by a bidder must be acknowledged by signing an acknowledgement of receipt of the amendment. Such acknowledgement must be received prior to the hour and date specified for receipt of bids.
- 5 **SUBMISSION OF BIDS:**
 - a) Bids and modifications thereof shall be enclosed in sealed envelopes and addressed to the office specified in the Solicitation. The bidder shall show the hour and date specified in the Solicitation for receipt, the Solicitation number, and the name and address of the bidder on the face of the envelope.
 - b) Telegraphic bids will not be considered unless authorized by the Solicitation. However, bids may be modified or withdrawn by written or telegraphic notice, provided such notice is received prior to the hour and date specified for receipt (see paragraph 6 of these instructions).

- c) Samples of items, when required, must be submitted within the time specified, unless otherwise specified by the Government, at no expense to the Government. If not destroyed by testing, samples will be returned at bidder's request and expense, unless otherwise specified by the Solicitation.
 - d) Samples or descriptive literature should not be submitted unless it is required on this solicitation. Regardless of any attempt by a bidder to condition the bid, unsolicited samples or descriptive literature will not be examined or tested at the bidder's risk, and will not be deemed to vary any of the provisions of this Solicitation.
- 6 **FAILURE TO SUBMIT BID:** If no bid is to be submitted, do not return the solicitation unless otherwise specified. A letter or postcard shall be sent to the issuing office advising whether future Solicitations for the type of supplies or services covered by this Solicitation are desired.
- 7 **LATE BID, LATE WITHDRAWALS, AND LATE MODIFICATIONS:**
- a) Definition: Any bid received after the time and date set for receipt of bids is late. Any withdrawal or modification of a bid received after the time and date set for opening of bids at the place designated for opening is late (Guam Procurement Regulations Section 3-202)
 - b) Treatment: No late bid, late modification, or late withdrawal will be considered unless received before contract award, and the bid, modification, or withdrawal would have been timely but for the action or inaction of territorial personnel directly serving the procurement activity.
- 8 **DISCOUNTS:**
- a) Notwithstanding the fact that prompt payment discounts may be offered, such offer will not be considered in evaluating bids for award unless otherwise specified in the Solicitation. However, offered discounts will be taken if payment is made within the discount period, even though not considered in the evaluation of bids.
 - b) In connection with any discount offered, time will be computed from date of delivery and acceptance of the supplies to the destination as indicated in the purchase order or contract. Payment is deemed to be made for the purpose of earning the discount on the date of mailing of the Government check.
- 9 **GOVERNMENT FURNISHED PROPERTY:** No material, labor or facilities will be furnished by the Government unless otherwise provided for in the Solicitation.
- 10 **SELLERS' INVOICES:** Invoices shall be prepared and submitted in quadruplicate (one copy shall be marked "original") unless otherwise specified. Invoices shall be "certified true and correct" and shall contain the following information: Contract and order number (if any), item numbers, description of supplies or services, sizes, quantities, unit prices, and extended total. Bill of lading number and weight of shipment will be shown for shipments made on Government bills of lading.
- 11 **RECEIPT, OPENING AND RECORDING OF BIDS:** Bids and modifications shall be publicly opened in the presence of one or more witnesses, at the time, date, and place designated in the Invitation for Bids. The name of each bidder, the bid price, and such other information as is deemed appropriate by the Procurement Officer, shall be read aloud and recorded, or otherwise made available. The names and addresses of required witnesses shall be recorded at the opening. The opened bids shall be available for public inspection except to the extent the bidder designates trade secrets or other proprietary data to be confidential as set forth in accordance with Section 12 below. Material so designated shall accompany the bid and shall be readily separable from the bid in order to facilitate public inspection of the non-confidential portion of the bid. Prices,

makes and models or catalogue numbers of the items offered, deliveries, and terms of payment shall be publicly available at the time of bid opening regardless of any designation to the contrary (Guam Procurement Regulations Section 3-202.12.2).

- 12 **CONFIDENTIAL DATA:** The Procurement Officer shall examine the bids to determine the validity of any requests for nondisclosure of trade secrets and other proprietary data identified in writing. If the parties do not agree as to the disclosure of data, the Procurement Officer shall inform the bidders in writing what portions of the bid will be disclosed and that, unless the bidders protest under Chapter 9 of the Guam Procurement Act (P.L. 16-124), the bids will be so disclosed. The bids shall be opened to public inspection subject to any continuing prohibition on the disclosure of confidential data (Guam Procurement Regulations Section 3-202.12.3).

13 **MULTI-STEP SEALED BIDDING:**

- a) It is defined as two-phase process consisting of a technical first-phase composed of one or more steps in which bidders submit unpriced technical offers to be evaluated by the territory, and a second-phase in which those bidders whose technical offers are determined to be acceptable during the first-step have their priced bids considered. It is designed to obtain the benefits of competitive sealed bidding by award of a contract to the lowest responsive, responsible bidder, and at the same time obtained the benefits of the competitive sealed proposals procedure through the solicitation of technical offers and the conduct of discussions to evaluate and determine the acceptability of technical offers.
- b) In addition to the requirements set forth in the General Terms and Conditions and the Special provisions, the following applies:
- 1). only unpriced technical offers are requested in the first phase;
 - 2). priced bids will be considered only in the second phase and only from bidders whose unpriced technical offers are found acceptable in the first phase;
 - 3). the criteria to be used in the evaluation at those specified in the Special Provisions and the General Terms and Conditions;
 - 4). the territory, to the extent the Procurement Officer finds necessary, may conduct oral or written discussion of the unpriced technical offers;
 - 5). the bidders, may designate those portions of the unpriced technical offers which contain trade secrets or other proprietary data which are to remain confidential; and,
 - 6). the service being procured shall be furnished generally in accordance with bidder's technical offer as found to be finally acceptable and shall meet the requirements of the Invitation for Bids.

c) **RECEIPT AND HANDLING OF UNPRICED TECHNICAL OFFERS.**

Unpriced technical offers shall not be opened publicly, but shall be opened in front of two or more procurement officials. Such offers shall not be disclosed to unauthorized persons. Bidders may request nondisclosure of trade secrets and other proprietary data identified in writing.

d) **EVALUATION OF UNPRICED TECHNICAL OFFERS.**

The unpriced technical offers submitted by bidders shall be evaluated solely in accordance with the criteria set forth in the Invitation for Bids. The unpriced technical offers shall be categorized as:

- 1). acceptable;
- 2). potentially acceptable, that is, reasonably susceptible of being made acceptable; or
- 3). unacceptable. 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 Phase Two of the procedure if, in the Procurement Officer's opinion, there are sufficient acceptable unpriced technical offers to assure effective price competition in the second phase without technical discussions. If the Procurement Officer finds such is not the case, the Procurement Officer shall issue an amendment to the Invitation for Bids or engage in technical discussions as set forth in Subsection 3-202.20.5 of this Section.

Upon the completion of Phase One, the Procurement Officer shall invite each acceptable bidder to submit a price bid. Upon submission of prices, the Procurement Officer shall prepare the final evaluation and reconsideration for the Chief Procurement Officer's approval.

ENVELOPE II (Sealed Separately)

15 FORM 15 – PROPOSED PRICE

Bidder warrants that the proposed Price to be inserted in the tables below, is based on the requirements of the IFMSB, and the specific Price instructions of Article 4 of Section B.

Each Bidder shall complete the schedules and tables in the following pages by providing the required data where applicable. There shall be no changes in format allowed to be made to the schedules and tables by any Bidder.

15.1 Schedule of Commercial Operation

Table 15.1: Schedule of Commercial Operation Period

Phase	Commercial Operation Date ¹ (dd/mm/yyyy)	Number of Months ²	Contracted Facility Capacity ³ for ULSD Operation or Non-Fossil Fuel Fired Facility.	Contracted Facility Capacity ⁴ for Natural Gas Operation.	Guaranteed Amount of Renewable Energy (GARE) ⁵	Renewable Component Degradation Guarantee
Phase 1		10	_____ MWs	_____ MWs	_____ MWh/yr	_____ %
Phase 2		290	_____ MWs	_____ MWs	_____ MWh/yr	_____ %

Contracted Facility Capacity must be based on the portion of the Facility that is fully dispatchable on a continuous basis.

¹ The proposed Date must be the first day of a month.
² COD must be December 31, 2021 or earlier.
³ Contracted Facility Capacity must be within plus/minus 10% of the preferred capacity of 180 MW.
⁴ Contracted Facility Capacity must be within plus/minus 10% of the preferred capacity of 180 MW.
⁵ GARE is based on a Typical Meteorological Year (TMY) and will be demonstrated by means of a PVSyst production forecast (in the case of PV solar) or a WindSim production forecast (in the case of wind).

15.2 Proposed Fixed Capacity Charges (FCCs)

Each Bidder shall complete the FCC table below. These values will be used in Equations 4.1 of Section B to calculate the FCCs to be paid by GPA. Once submitted, there shall be no changes allowed to be made to the table by any Bidder. Bidders are free to propose a different FCC for each Contract year in the table below, but in no event shall the FCC vary by more than 10% (+or-) from one Contract Year to another commencing with Contract Year 2 compared to Contract Year 1. Furthermore, the ratio of the Maximum FCC to the Minimum FCC below shall not exceed 1.50.

Table 15.2: Proposed Fixed Capacity Charge

Agreement Period	FCC ¹ (US\$/kW/Month)
Contract Year 1 (Phase 1)	
Contract Year 1 (Phase2)	
Contract Year 2	
Contract Year 3	
Contract Year 4	
Contract Year 5	
Contract Year 6	
Contract Year 7	
Contract Year 8	
Contract Year 9	
Contract Year 10	
Contract Year 11	
Contract Year 12	
Contract Year 13	
Contract Year 14	
Contract Year 15	
Contract Year 16	
Contract Year 17	
Contract Year 18	
Contract Year 19	
Contract Year 20	
Contract Year 21	
Contract Year 22	
Contract Year 23	
Contract Year 24	
Contract Year 25	

¹ Contract Years are each of 12 months duration, with Contract Year 1 beginning at COD.

15.3 Fixed Operations & Maintenance Charge (FOMC)

Each Bidder shall complete the FOMC table detailed below. These values will be used in Equation 4.2 of Section B to calculate the FOMC to GPA. The FOMC will be adjusted each year based on the inflation Index. Once submitted, changes will not be allowed to be made to the table by any Bidder. For Projects offering a Fossil Fuel Fired Component, evaluation will be performed based on the FOMC for the Facility operating on ULSD for Contract Years 1 through 3 and on Natural Gas for the remainder of the Term.

Table 15.3: Proposed Fixed Operation and Maintenance Charge

Agreement Period	FOMC on ULSD or for Non-Fossil Fuel Fired Facility (US\$/kW/Month)	FOMC on Natural Gas (US\$/kW/Month)
Phase 1 Commercial Operation Date through Phase 2 Commercial Operation Date		
Phase 2 Commercial Operation Date through end of the Term		

15.4 Variable O&M Charge (VOMC)

Each Bidder shall complete the VOMC as detailed in the table below. These values will be used in Equation 4.3 of Section B to calculate the VOMC to GPA. The VOMC will be adjusted each year based on the inflation Index. Once submitted, changes will not be allowed to be made to the table by any Bidder. For a Project offering a Fossil Fuel Fired Component, evaluation will be performed based on the VOMC for the Facility operating on ULSD for Contract Years 1 through 3 and on Natural Gas for the remainder of the Term.

Table 15.4: Proposed Variable O&M Charge

Agreement Period	VOMC on ULSD of for Non-Fossil Fuel Fired Facility (US\$/kWh)	VOMC on Natural Gas (US\$/kWh)
Phase 1 Commercial Operation Date through Phase 2 Commercial Operation Date		
Phase 2 Commercial Operation Date through end of the Term		

15.5 Fuel Charge (FC)

The Fuel Charge portion of the Price to the Bidder will be calculated at the end of each billing period based on the Guaranteed Heat Rate, adjusted for the billing period ambient temperatures and Fossil Fuel Fired Component loads using Equations 4.4 for ULSD and/or 4.5 of Section B, as applicable, and the values provided in Tables in this Section 15.5 of Envelope II.

For purposes of evaluation, it will be assumed that the Facility operates at the load profile described in Article 15.7.1 below. It will also be assumed that the Facility uses ULSD for Contract Years 1 through 3 and Natural Gas for the remainder of the ECA Term.

Bidders shall provide their proposed Guaranteed Heat Rates for the Commercial Operation Period in this Section 15.5 based on the Higher Heating Value for Fuel at Site Reference Conditions (SRC) at different Facility outputs. These data shall be used for calculation of allowable Fuel consumption.

The Guaranteed Heat Rate shall not be corrected for degradation at any time during the ECA Term. These Guaranteed Heat Rates shall remain effective for the entire Term of the Project. Bidders must therefore account for heat rate degradation when establishing their proposed Guaranteed Heat Rates. Once submitted, no changes will be allowed to be made to the data in these tables by any Bidder.

Table 15.5: Guaranteed Phase 1 Heat Rates at Site Reference Conditions on ULSD

Percent of Dependable Capacity ¹	Guaranteed Heat Rate (HHV) (Btu/kWh) ²
100%	
95%	
90%	
85%	
80%	
75%	
70%	
65%	
60%	
55%	
50%	
45%	
40%	
35%	
30%	
25%	
20%	

¹ Initial Dependable Capacity must be within plus/minus 10% of the preferred capacity of 180 MW.

² Use linear interpolation when the load values fall between the stated percentages.

Percent of Dependable Capacity ¹	Guaranteed Heat Rate (HHV) (Btu/kWh) ²
15%	
10%	
Minimum Load	

Table 15.6: Guaranteed Phase 1 Heat Rates at Site Reference Conditions on Natural Gas

Percent of Dependable Capacity ¹	Guaranteed Heat Rate (HHV) (Btu/kWh) ²
100%	
95%	
90%	
85%	
80%	
75%	
70%	
65%	
60%	
55%	
50%	
45%	
40%	
35%	
30%	
25%	
20%	
15%	
10%	
Minimum Load	

¹ Dependable Capacity must within plus/minus 10% of the preferred capacity of 180 MW.

² Use linear interpolation when the load values fall between the stated percentages.

Table 15.7: Guaranteed Phase 1 Heat Rate Correction Curve for Air Temperature Variations

Temperature, %F	K _t %, ULSD	K _t %, Natural Gas
110		
105		
100		
95		
88.9¹		
85		
80		
75		
70		
65		
60		

Table 15.8: Guaranteed Phase 2 Heat Rates at Site Reference Conditions on ULSD

Percent of Dependable Capacity ²	Guaranteed Heat Rate (HHV) (Btu/kWh) ³
100%	
95%	
90%	
85%	
80%	
75%	
70%	
65%	
60%	
55%	
50%	
45%	

¹ Reference Site Condition ambient temperature.

² Initial Dependable Capacity must be within plus/minus 10% of the preferred capacity of 180 MW.

³ Use linear interpolation when the load values fall between the stated percentages.

Percent of Dependable Capacity ²	Guaranteed Heat Rate (HHV) (Btu/kWh) ³
40%	
35%	
30%	
25%	
20%	
15%	
10%	
Minimum Load	

Table 15.9: Guaranteed Phase 2 Heat Rates at Site Reference Conditions on Natural Gas

Percent of Dependable Capacity ¹	Guaranteed Heat Rate (HHV) (Btu/kWh) ²
100%	
95%	
90%	
85%	
80%	
75%	
70%	
65%	
60%	
55%	
50%	
45%	
40%	
35%	
30%	

¹ Dependable Capacity must be within plus/minus 10% of the preferred capacity of 180 MW.

² Use linear interpolation when the load values fall between the stated percentages.

Percent of Dependable Capacity ¹	Guaranteed Heat Rate (HHV) (Btu/kWh) ²
25%	
20%	
15%	
10%	
Minimum Load	

Table 15.10: Guaranteed Phase 2 Heat Rate Correction Curve for Air Temperature Variations

Temperature, %F	K _t ,%, ULSD	K _t ,%, Natural Gas
110		
105		
100		
95		
88.9¹		
85		
80		
75		
70		
65		
60		

15.6 Supplemental Charges

15.6.1 Startup Charges

The Bidder shall propose in the Tables in this Section 15.6.1 fuel consumption values for startups of the individual Units installed at the Facility under the three different startup conditions. These values will be used to determine the allocation of Fuel cost between the Bidder and GPA depending upon which party is responsible for a particular startup. The Bidders shall provide necessary technical justification for fuel consumption values included this Section 15.6.1. The Bidder shall propose in this Section 15.6.1 costs other than Fuel that are associated with each type of startup, such as incremental major maintenance costs. These values will be used to determine Supplemental Charges owed by GPA for GPA dispatch related startups.

¹ Reference Site Condition ambient temperature.

Table 15.11: Fuel Consumption per Unit For Startups

Type of Start	Cold Start		Warm Start		Hot Start	
	ULSD	NG	ULSD	NG	ULSD	NG
Fuel Consumption, MMBTU (HHV)						

Table 15.12: Non-Fuel Supplemental Charge For Startups

Type of Start	Cold Start		Warm Start		Hot Start	
	ULSD	NG	ULSD	NG	ULSD	NG
Phase 1 Non-Fuel Supplemental Charge, US\$/start						
Phase 2 Non-Fuel Supplemental Charge, US\$/start						

15.6.2 Synchronous Condenser O&M Charges

The Bidder shall propose in the Tables in this Section 15.6.2 O&M charges for synchronous condenser. The O&M charges for operation of synchronous condenser will include Synchronous Condenser Fixed Hourly Charge for each hour when synchronous condenser is connected to the grid (SCFHC), and Synchronous Condenser VAR Production Charge (SCVARPC) for reactive power produced by the synchronous condenser.

Table 15.13: Synchronous Condenser Fixed Hourly Charge

Agreement Period	SCFHC, USD/hr.
Commercial Operation Date through end of the Term	

Table 15.14: Fixed Hourly Charge

Agreement Period	SCVARPC, USD/VARh.
Commercial Operation Date through end of the Term	

15.7 Evaluated Present Value

The Proposals will be evaluated based on the Present Value of the total costs of system generation to GPA assuming the incorporation of the Facility into the system. The Present Value will be calculated using the simplified dispatch and cost spreadsheet to be provided as an Addendum to the IFMSB documents (the "Evaluation Model") and assuming the Facility characteristics, guarantees, and charges set forth in Bidder's Proposal and the assumptions described below.

15.7.1 Assumptions for Evaluation

- 1 Inflation Adjusted Indices: For purposes of evaluation, it will be assumed that the annual FOMC and the VOMC charges will remain constant (no index adjustments) for the duration of the ECA Term.
- 2 Discount Rate: For purposes of evaluation, the discount rate used to calculate the Present Value (PV) will be 7% on an annual basis.
- 3 Price of Fuel: Evaluation will be performed assuming operation on ULSD for Contract Years 1 through 3 and on Natural Gas for the remainder of the ECA Term. For purposes of evaluation, fuel prices will be based on the GPA fuel price forecast included in Section A, Appenix F
- 4 Land Lease Rent: GPA does not intend to assess a lease fee .
- 5 Taxes and Customs Duties: Bidder should include any and all taxes and customs duties that will apply over the term of the Project as of the Bid Date. Assume that there will be no unplanned changes in taxes and customs duties during the Term.
- 6 Plant Operating Parameters:
 - a) A 25-year system demand load forecast is provided in the Evaluation Model.
 - b) A 25-year system solar production forecast is also provided in the Evaluation Model. The evaluation assumes that this solar production is dispatched prior to dispatch of the Facility.
 - c) The Evaluation Model assumes that certain existing thermal units are dispatched on a forced basis ahead of the Facility for technical and/or contractual reasons.
 - d) The Facility is assumed to be dispatched to meet any system demand load requirement not met by the combined production from the solar facilities and forced dispatch of the existing thermal units as mentioned above.
 - e) Any residual demand load not met by the Facility is assumed to be served by dispatch of other existing thermal units prioritized in accordance with lowest marginal cost to the system.
- 7 Heat Rate: For purposes of evaluation, there will be no correction for changes in temperature or barometric pressure compared to the Reference Site Conditions as defined in Section C, or for degradation. However, the proposed temperature and load correction curves will be evaluated for reasonableness.
- 8 Supplemental Charges: For purposes of evaluation, it will be assumed that there will be 360 starts per Unit per Contract Year in addition to the annual startup allowance specified in Section B, Article 4.5.

For purposes of evaluation it will also be assumed that the synchronous condenser will be connected to the grid for [TBD] hours and produce [TBD] VARh per year.

- 9 In the case of a hybrid plant with both a Fossil Fuel Fired Component and a Renewable Component, the evaluation will assume that GPA will dispatch and purchase a certain amount of Excess Energy each Contract Year. The concept of Excess Energy is derived from the Renewable Component's potential to increase available Facility capacity beyond the Contracted Capacity. In the Evaluation Model, it will be assumed that the amount of Excess Energy for each

Contract Year equals [TBD] of the Guaranteed Amount of Renewable Energy for such year. The price of the Excess Energy will be equal to VOMC plus Fuel Charge. The Fuel Charge for Excess Energy will be calculated based on the Guaranteed Heat Rate corresponding to 100% load (entry A from Table 15.5 for Contract Years 1 through 3 and Table 15.6 for Contract Years 4 through 25).

15.7.2 Resulting Present Value

Total annual costs will be calculated based on the operating parameters outlined above. A Present Value of all contract years will be the basis of evaluation between bid proposals. The least cost proposal will be selected for award.