



**REQUEST FOR SEALED PROPOSAL
NUMBER 23J-09392**

**ACQUISITION OF PRIME POWER RECIPROCATING ENGINE
GENERATORS FOR THE PUERTO RICO PORTS AUTHORITY**

RFP Publication Date: Friday, February 17, 2023, at 5:00 pm AST

Proposal Submission Date: Friday, March 23, 2023, at 9:00 am AST

Proposal Opening Date: Thursday, March 23, 2023, at 9:30 am AST

Contact: preguntas@asg.pr.gov

Issued by:

The Bid Board of the General Service Administration of the Government of Puerto Rico

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1 INTRODUCTION

1.1 DEFINITIONS AND ACRONYMS

- **ASG** – means the “Administración de Servicios Generales” of Puerto Rico (or the Puerto Rico General Services Administration).
- **Award Notice** – refers to the act of announcing the selected proponent(s) upon evaluating proposals in response to a Request for Proposal with the intention of granting a contract to the proponent that best meets the criteria, specifications, terms, and conditions established.
- **Best Value** – refers to the expected outcome of an acquisition that, in the Government of Puerto Rico’s estimation, provides the greatest overall benefit to the Government of Puerto Rico in response to the requirements.
- **Bid Board** – shall have the meaning set forth in Article 1.6(36) of the Uniform Regulation for Purchases and Proposals of Goods, Works, and Nonprofessional Services of the General Services Administration of the Government of Puerto Rico or Regulation No. 9230 of ASG.
- **Proposal Package** – refers to this Request for Sealed Proposals with all of its attachments, Addenda, and responses to Request for Clarifications.
- **Bid Review Board** – shall have the meaning set forth in Article 1.6(37) of the Uniform Regulation for Purchases and Proposals of Goods, Works, and Nonprofessional Services of the General Services Administration of the Government of Puerto Rico or Regulation No. 9230 of ASG.
- **Proponent**– means a(n) (i) natural person, (ii) legal person, (iii) joint venture, or (iv) partnership, or (v) consortium of individuals, and/or partnerships, and/or companies or other entities that submit a response to this Request for Sealed Proposals that is not currently debarred in any federal, state and/or local jurisdictions.
- **Business Hours** – refers to non-Government holiday, non-weekend hours between 8:00 AM Atlantic Standard Time (AST) and 5:00 PM AST. Scheduled preventive maintenance, scheduled upgrades, time before initial installation, and unavailability due to power outages, lack of network availability, or force majeure events are excluded from Business Hours available.
- **Vendor** – means the Selected Proponent which has executed a contract by the Puerto Rico Ports Authority for the purchase and delivery of the Equipment set forth in this RFP.
- **Electronic Signature** – refers to a digital image of a hand-written signature that serves as an official signature in binding legal documents.
- **Engine Generator** – refers to Prime Power Reciprocating Engine Generator.
- **Engineer** – refers to Jacobs PR, PSC.
- **Equipment** - refers to the Equipment, its specifications and related services that are described in a separate document labeled “**Equipment Specifications and Services**” as specified in Section 4 of this RFP.
- **Evaluation Committee** – shall have the meaning set forth in Article 1.6(10) of the Uniform Regulation for Purchases and Proposals of Goods, Works, and Nonprofessional Services of the General Services Administration of the Government of Puerto Rico or Regulation No. 9230 of ASG.
- **FEMA** – refers to the Federal Emergency Management Agency.
- **Financial Oversight Management Board** or **FOMB** – refers to the Board created under the Puerto Rico Oversight, Management, and Economic Stability Act of 2016 (PROMESA).
- **Government** – means the Government of Puerto Rico. It is inclusive of but not limited to

other government branches, municipalities, and instrumentalities.

- **Government Entity** – refers to any department, agency, board, commission, body, bureau, office, public corporation, or instrumentality of the Executive Branch, whether existing or to be created in the future.
- **Instrumentality** – means any entity, agency, or public corporation of the Government.
- **Liquidated Damages** – an amount of money, agreed upon by the parties at the time of the contract signing, that establishes the damages that can be recovered in the event a party breaches the contract as established in **Attachment I**.
- **OSHA**- refers to the Occupational Safety and Health Administration.
- **Owner** – refers to the Puerto Rico Ports Authority (PRPA or Ports Authority or Authority).
- **Proposal** – means a proposal submitted by a Proponent pursuant to this RFQ.
- **PRPA** – refers to the Puerto Rico Ports Authority or “Autoridad de los Puertos de Puerto Rico”.
- **RUL** – refers to ASG’s “Registro Único de Licitadores” or Proponents Sole Register.
- **Request for Sealed Proposals or RFP or Request for Proposals** - refers to this Request for Sealed Proposal, its attachments and all addenda issued by ASG. Request for Proposals with an estimated cost greater than \$100,000, as defined by ASG’s Uniform Regulation for Purchases and Proposals of Goods, Works, and Nonprofessional Services, are named Request for Sealed Proposals and they require a sealed proposal. This process is technically a Request for Sealed Proposal, but for practical matters the term Request for Proposal or RFP will be used throughout this document and process.
- **Supplier** – refers to the entity supplying equipment and/or materials to Vendor.
- **Uniform General Conditions for Public Works Contracts in Puerto Rico** – refers to the portion of the contract document in which the rights, responsibilities, and relationships of the parties involved are itemized. It defines each contracting party's duties and privileges, and the rules that will govern the relationship.
- **Uniform Regulation for Purchases and Proposals of Goods, Works, and Nonprofessional Services of the General Services Administration of the Government of Puerto Rico or Regulation No. 9230**—refers to ASG Regulation No. 9230, approved November 18, 2020. The provisions of this Regulation shall apply to all procedures of purchases and proposals of goods, works and nonprofessional services carried out by ASG.
- **Selected Proponent** – means the selected Proponent to be awarded a contract as a result of this Request for Sealed Proposals.

1.2 BACKGROUND

The Government of Puerto Rico (“Government”) is responsible for administering public resources and providing all necessary public services to the Puerto Rican general public, consisting of approximately 3.3 million people. The Government’s current Fiscal Plan calls for “Financial Control Reforms” to improve budget to cash and overall financial reporting and controls, and procurement reform has been identified as one of the key enablers to achieve this goal. To this end, the Government is implementing modern practices to improve the efficiency and effectiveness of procurement operations, including strategic sourcing of categories of goods and services identified as essential to achieve government-wide savings and significantly reduce the cost of purchased goods and services. The Bid Board is issuing this Request for Sealed Proposals (“RFP”) to invite

interested suppliers to submit proposals for the acquisition of prime power reciprocating engine generators for the Puerto Rico Ports Authority (herein “PRPA”)

1.3 THE PUERTO RICO GENERAL SERVICES ADMINISTRATION

The Puerto Rico General Services Administration (ASG, for its Spanish acronym), by virtue of Act No. 73 of July 2019, as amended, known as the “General Services Administration Act for the Centralization of Procurement of the Government of Puerto Rico” is the entity responsible for processing all purchases and proposals of goods, works, and nonprofessional services of the Government. ASG has the authority to act as the procuring and negotiating entity for all Government entities.

Act 73-2019, as amended, establishes as public policy of the Government the centralization of purchases and acquisition processes to generate greater savings for the benefit of Puerto Rico. ASG adopts Regulation No. 9230, known as the *"Uniform Regulation for Purchases and Proposals of Goods, Works, and Nonprofessional Services of the General Services Administration of the Government of Puerto Rico"*, by virtue of the authority vested in it by Article 25 of Act 73-2019, as amended. The provisions of this regulation shall apply to all procedures of purchases and proposals of goods, works and nonprofessional services carried out by ASG.

1.4 RFP TIMELINE

The timeline for this RFP is presented below in **Table 1.4.1**. All items must be received by the stated deadline.

Table 1.4.1 RFP General Timeline.

Target Date	Event
February 17, 2023	Publication of RFP at 5:00 pm
March 3, 2023	Last Day to Submit Questions (RFCs) – 4:00 pm AST: preguntas@asg.pr.gov March 14, 2023 Issuance of Answers to question
March 23, 2023	Proposal Submission Deadline – 9:00 am AST Proposal must be submitted in the following two ways: <ul style="list-style-type: none">• In a hard copy delivered to address: Office of the Secretary of the Bid at Centro Gubernamental de Minillas, Torre Norte, Piso 12, San Juan, Puerto Rico; and• By Email: ofertas@asg.pr.gov
March 23, 2023	RFP Opening Act – 9:30 am AST

*A Best and Final Offer may be requested at the discretion of the Bid Board (consult Section 5.7).

Please also note that the RFP timeline includes target dates that are subject to change. It is the responsibility of Proposers to periodically review their emails and the ASG website (<https://asg.pr.gov/subastas>) for all information and updates related to this RFP.

1.5 REQUEST FOR CLARIFICATIONS (RFC)

Requests for clarification and questions regarding this RFP should be emailed to preguntas@asg.pr.gov on or before **Friday, March 3, 2023**. Said email must contain in the

SUBJECT the following information: RFP number and name of the Bidder/Proposer and company it represents.

ASG will compile all questions and will issue its responses on the website (<https://asg.pr.gov/subastas>). In addition, the ASG will notify such clarifications or responses individually to each Proposer. It will be the responsibility of the Proposers to download from the website the document that contains all the answers to the request for clarification.

From the publication of this RFP until it is awarded, Proposers may not have any communication with the members of the Bid Board or with the officials of the Auxiliary Procurement Administration and the ASG Purchasing Office. Questions related to the RFP can only be sent through the email provided above. Questions sent to other emails will not be answered.

Bidders and Proponents may not contact the Bid Board or ASG by any other means. This includes personal visits, phone calls, texts, emails, or any other mode of communication.

1.6 PRE-PROPOSAL MEETING

The virtual pre-proposal meeting will be held on the day and time established in Table 1.4.1. Any Proponent or interested person will be able to access the pre-proposal meeting link through the ASG's website at the following link: <https://asg.pr.gov/subastas> in the folder titled 23J-09392.

The primary purpose of the pre-proposal meeting is to clarify instructions for completing the technical sections of the RFP and the Cost Form (Attachment D), as well as to provide further clarification to RFP requirements and existing questions.

Participation in the pre-proposal meeting is **mandatory, and all interested Proponents must access the meeting before the conference starts**. All interested Proponents will have to access the meeting before the conference starts. The registration process for the meeting will begin at least five (5) minutes before the time scheduled for the pre-proposal meeting. Participants are encouraged to actively participate to maximize the opportunity to communicate directly with the government and have questions answered regarding the RFP.

Any proponent who submits a proposal but does not attend the pre-proposal meeting **will be disqualified**.

1.7 RUL REGISTRATION

Interested Proposers must follow the following steps for submitting a complete RFP:

RUL: All Proponents must be registered in the RUL. Proposers can access the RUL via the following link: <https://rul.asg.pr.gov/>. When a Proposer that is not registered in the RUL appears in the RFP process and presents an offer, that Proposer should not be rejected by the Bid Board and will be granted a period of **five (5) business days**, starting from the Opening of Proposals, to submit the required documents to the RUL. If the proposer does not submit the required documents, he will be disqualified. *See Regulation No. 9230, Section 7.4.11.*

Any Proposer 1) registered in the RUL; 2) who has presented an offer for the request; and 3) after the Opening of Proposals is found ineligible, will be granted **five (5) non extendable business**

days, starting on the Opening of Proposals, to submit the corresponding information or documents to the RUL. During said period, no award will be made. It will be the responsibility of the Secretary of the Bid Board and the Purchase and Auction Specialist to notify the Bidder/Proposer, through a phone call and email, so that within the term provided they update their records in the RUL. The Bidder/Proposer must submit all the requested documents and certifications, and comply with all requisites, terms, and conditions established in the RFP at the moment of submitting the offer. No document will be accepted by a Proposer after the opening, except for the RUL's certification of eligibility, which will be subject to presentation during the time afore stated. The ineligible bidder will not be visible in the RUL; hence, will not be contracted by any of the Executive Branch agencies, public corporations, or municipalities. Ineligibility will be maintained until the Bidder complies with the requirement of information or the presentation of the solicited documents. **The Proposer must sustain the status of eligibility in the RUL before the awarding of the proposal. See Uniform Regulation No. 9230 from November 18, 2020.**

1.8 UNIVERSAL IDENTIFIER AND SYSTEM FOR AWARD MANAGEMENT

Prior to executing the awarded contract, a Selected Proponent is required to register in the System for Award Management (SAM) as stated in 2 CFR, Subtitle A, Chapter 25. The following link can be used for the registration: <https://www.sam.gov/SAM/pages/public/index.jsf>.

1.9 RFP SUBMISSION: DATE, TIME, AND DELIVERY METHOD

Proposals must be submitted, on or before **9:00 am AST of Thursday, March 23, 2023, in the following two ways:**

1. before the Office of the Secretary of the Bid Board at the Minillas Government Center, North Tower, 12th Floor, San Juan, Puerto Rico; **and**
2. electronically to the following address: ofertas@asg.pr.gov

Proposals that arrive after the established date and time will not be accepted. Sealed envelope must be submitted physically to the Secretary Office of the Bid Board at the address described above. **The envelope must be identified with the name, address and telephone number of the bidder and the company it represents, as well as the RFP number.** Upon receipt of the envelope, the Secretary will proceed to seal all pages and documents with the exact date and time it was received, which will constitute the official delivery date of the offer. **The document physically delivered will be considered the official offer.**

Any offer received without identifying as established herein will be processed as regular correspondence. Under this circumstance, the Bid Board will not be responsible if the sender loses his opportunity to present the offer on time, nor will it be able to require that his offer be made known or impute that the offer has been disclosed or opened before time. Proposers may be disqualified for not attaching all documents to his offer.

Email submissions must include the offers as an attachment and be labeled as **“Subject: Offer, RFP 23J-09392 and Proposer name.”** **It must be a faithful and exact copy of the documents physically delivered or the Bidder/Proposer will be disqualified.** As an exception, attachments may be physically accepted that, due to the size of their content, exceed the space

available to be sent by email. If the proposal is sent multiple times, the Bid Board will only accept the last submitted version before the deadline.

Failure to submit via both methods (in-person in a sealed envelope and by email) shall result in the Bidder's/Proposer/s disqualification.

1.10 RFP OPENING: DATE AND TIME

The Opening of Proposals will take place on **9:30 am AST of Thursday, March 23, 2023**. Every person interested in participating in the Opening of Proposals, held virtually, will be able to assist through the ASG online page, specifically under the "Procurement Reform" area (<https://asg.pr.gov/subastas>). Once there, the Proposer should navigate to the corresponding folder for the reference RFP that provides the option of connecting to the "virtual Opening of Proposals." The Opening of Proposals' purpose is to allow the people interested to verify if the proposals were received and the names of all Proposers. The Opening of Proposals shall be directed by one of the members of the Bid Board or its authorized representative, who will be present in said act and will be charged with the proceedings during the event. Every person who attends the opening act must comply with the standards of conduct established by the Bid Board.

2 PROPOSAL REQUIREMENTS

2.1 PROPOSAL FORMAT

Proposals shall be prepared in the following format:

- Font "*Times New Roman*" size twelve (12)
- Single space
- Paper 8½ x 11 paper with a minimum of one (1) inch margin
- Pages numbered consecutively
- Documents in "PDF"

2.2 PROPOSAL CONTENT

Proposals should include the following documents:

- a. Cover Letter
- b. Pricing Worksheet
- c. Literature for each product offered, with the corresponding row and item number, and manufacturer's letter, as applicable.
- d. Certifications
- e. Bid Bond
- f. Valid resolution issued by the Puerto Rican Industry Investment Board, Puerto Rico Trade and Export Company, or any other governing body for the use of the percent of preference policies, if applicable.
- g. The RFP must contain the physical and postal address of the company's main office in Puerto Rico, as well as the name and address of the corporation's resident agent, when applicable.
- h. Any other document required in this RFP or specifications attached.
- i. Amendments to the RFP, if applicable.

2.3 COVER LETTER

Bidders must submit a one (1) page cover letter that includes the following:

- Full Name of the Bidder's Organization
- Name of Contact Person
- Contact Information (phone, e-mail, and postal address) for technical and cost questions
- RFP Number
- Signature of authorized person as registered in RUL

Please include the following language in the Cover Letter:

"I hereby acknowledge that I have received and read the responses to the Proposer questions summarized in the Acknowledgement to Request for Clarification Response Document."

2.4 COST PROPOSAL

The Proponent must provide prices for all the Equipment and related services required for this RFP, using the attached **Cost Form (Attachment D)** to detail cost breakdown. There is no page limit. Proponent must fill in each blank space available in the Cost Form to identify all unit prices solicited in form.

It is understood that the quoted price shall include any and all costs, including but not limited to labor, equipment, materials, incidental work, delivery, transportation, overhead, profit, insurance, bonds, taxes, which may include but are not limited to sales and use taxes, income taxes, excise real or chattel property taxes, including any special taxes levied, municipal license taxes, tax withholdings for payment of salaries and professional services, taxes for payment of interest, dividends and income to individuals, corporations and non-resident accounting firms, for payment of interests, dividends and other earnings share to residents, unemployment insurance premiums, worker's compensation payments, social security for chauffeurs and ASUME, mobilization, demobilization, sub vendor work, personnel lodging and meals, materials laboratory testing, etc. to provide the Equipment in accordance with this RFP.

The Attachment D shall be duly sign by the authorized person in the RUL. Any proposal submitted without the signature RUL **will be disqualified**.

2.5 PROPOSAL SUBMISSION REQUIREMENTS

Proponents must comply with the mandatory requirements identified in this RFP for their Proposals to be evaluated. The Bid Board will evaluate proposals using a best value selection as described in this RFP, and the price shall not have the greatest weight in the award process.

The proposal shall be clear, concise, and include sufficient detail for an effective evaluation, and for substantiating the validity of stated claims. Proposals shall not simply rephrase or restate the Government's requirements, but rather shall provide a convincing rationale to address how the Proponent intends to meet the requirements. Proponents shall assume that the Government has no prior knowledge of their experience or best practices, and that qualifications and past performance reviews will be based only on the information presented in the Proponent's proposal. The Government reserves the right to request additional information that supports information presented by each proponent in the different sections.

All costs associated with the response to this RFP are the sole responsibility of the Proponent. Proponent's proposal shall follow format, order and content described below.

2.6 PROPOSAL CHECKLIST

The Proponent must review and submit all documents and/or information identified in the Proponent Proposal Checklist (**Attachment A**) as part of their proposal submission. Proponent must initialize each item listed and sign **Attachment A** as confirmation of proposal submission of all documents and information required by this RFP. Electronic signatures that comply with this requirement are accepted.

2.7 PROPONENT SUMMARY INFORMATION AND ADDENDA ACKNOWLEDGEMENT

Proponent must complete and sign **Attachment B** (Proponent Summary and Addenda Acknowledgment). Proponent Summary Information requested in **Attachment B** includes the following:

- Name of Proponent's organization
- Name of point of contact for proposal
- Email address and postal address of point of contact
- Telephone of the point of contact
- Universal Identifier Code from SAM, if applicable (see Section 3.7)
- RFP Number
- RFP Submission Deadline Date and Time
- Signature of Point of Contact

Proponent must acknowledge receipt of all Request for Clarification Response Document(s) and all RFP Addenda by completing and signing **Attachment B**. This form must be completed regardless, even if no addendum was issued for this RFP. **Attachment B** must be signed with indelible ink or blue pen by an authorized representative of the Proponent. The authorized representative must be the same point of contact registered in the RUL. Electronic signatures that comply with this requirement are accepted. In the event Proponent is not registered in RUL then it must be signed by the person that will submit all the documents and be designated as the point of contract in RUL.

2.8 FIRM EXPERIENCE AND FINANCIAL CAPACITY

2.8.1 BUSINESS PROFILE

Proponent must provide a business profile with detailed information identifying firm, including:

- Name of Business and/or Firm
- Name of other associated businesses, firms, and/or professionals
- Name of owner/s and/or principals
- Office location address
- Type of organization
- Services provided by business
- Years in business
- Registered Organizational Documents (Good Standing)

- Any licenses and credentials, as applicable.

Proponent shall provide an overview of business, number of years in service, and firm. Proponent shall describe the history and experience of the firm as it relates to the proposed Equipment, specifically focusing on works Proponent believes demonstrates their relevant qualifications and experience. Any proposed contracting of a sub vendor or manufacture must be named and identified, along with a description of the firm's experience and what role they will play in the Proponent's team. Additionally, Proponents must complete **Attachment M** identifying the source of critical components.

Proponents that are Puerto Rico based corporations, limited liability companies, partnerships, or any other legal entity, shall be duly and properly organized and/or registered in compliance with the applicable laws of Puerto Rico. Such entities must show that they are in "good standing" at the time of Proposal submission. The Proponent must submit organizational documents which will vary by the Proponent type of organization. Such documents may include (but are not limited to) Certificates of Incorporation, Partnership Agreements, Joint Venture Agreements, and Certificates of Good Standing.

In the event the Proponent is a foreign legal entity, including U.S. based entities, it shall be duly and properly organized and/or registered in compliance with the applicable laws of its place of organization and/or incorporation. Such entities must show that they are in "good standing" within their jurisdiction at the time of Proposal submission. If a contract is awarded to a foreign entity Proponent, said Proponent shall request authorization to do business in Puerto Rico before the execution of the Contract and shall comply with all Federal, State and Municipal applicable laws.

If applicable, Proponents must always ensure that professional, architectural, or engineering services are performed by licensed professionals with the proper qualifications, skills, and experience necessary to perform the services, according to applicable regulations.

2.8.2 COMPARABLE EXPERIENCE

Only Proponents with demonstrated experience in the manufacturing, testing, and servicing of PRIME POWER RECIPROCATING ENGINE GENERATORS will be considered. If the Proponent is a packager or independent representative, a letter shall be provided from the engine generator original equipment manufacturer authorizing the Proponent to sell and service the proposed engine generator package. Services to be provided with the base proposal shall be limited to that which is necessary to fulfill the warranty and installation requirements for the Equipment as set forth in this RFP. Proponent recommended maintenance service agreement shall be priced separately according to the Proposal Form in **Attachment D**.

Proponent must provide experience information for at least **three (3) comparable sales of Equipment** within the past 10 years of the RFP closing date by completing the **Comparable Fact Sheet (Attachment C)**. **Attachment C** shall be for equipment that is comparable to the one requested in this RFP (public sector clients preferred). These comparable contacts shall be used as **business references**. ASG personnel and the Bid Board may contact those references to verify information.

2.8.3 BUSINESS FINANCIAL CAPACITY

The Proponent must present prior year audited financial statements that confirm the firm's adequate financial resources to cover the proposal cost specified in Attachment D, and financial capacity to pay employees and sub vendors (if applicable) throughout contract regardless of timing of payments.

2.9 BRAND, MODEL, AND LITERATURE

In proposals where applicable, the Bidder/Proposer shall have to indicate the brand and model of the product, as well as include technical literature from the manufacturer, which will allow the verification of compliance with the required specifications by the product quoted. Mentioned literature or specifications sheets, will clearly indicate the bid item to which it refers. Literature and documentation that does not help validate compliance will not be accepted.

2.10 CERTIFICATIONS.

All Proposers must include in the proposal the forms provided, all the certifications required in this RFP and in the attached specifications. It is noted that every bidder will have to comply, without being limited to, with the following:

- A. CODE OF ETHICS FOR CONTRACTORS (as defined by the Anti-Corruption Code for the New Puerto Rico): Every Proposers must comply with the provisions of Law 2-2018, as amended, known as the "Anti-Corruption Code for the New Puerto Rico", which requires all Government Entities to operate under the standards of integrity, efficiency, probity, and transparency. This Code of Ethics emphasizes the public policy of the Government of Puerto Rico in the proper and efficient use of public resources and the eradication of government corruption. The Code requires that all contractors, suppliers of goods and services, and applicants for incentives refrain from carrying out or participating in conduct that, directly or indirectly, implies that public servants violate the provisions of the Government Ethics Law. Acceptance of the standards established in this Code of Ethics is an essential and indispensable condition for Proposers or their representatives to be able to carry out transactions or establish agreement with the executive agencies. Every person is obliged to denounce acts violating the aforementioned Code that constitute acts of corruption, or are configured in crimes constituting fraud, bribery, embezzlement, or illegal appropriation of funds, and of which they have their own and personal knowledge, that concern a contract, business or transaction between the Government and a contractor, supplier of goods or services. The complainants will be protected under Law 2, *supra*.
- B. CANONS OF ETHICS OF YOUR PROFESSION: Every person must observe the maxims and principles of excellence and honesty that cover their profession, in addition to the ethical standards or canons of the association or college to which they belong and that regulate their trade or profession, both in relation to their competitors and with the Government of Puerto Rico. In the case persons not belonging to an association or college, or in the case the associations and colleges do not possess a Code of Ethics, for its members, the persons must observe the general principals of ethical conduct that are considered reasonable in their profession or job.

2.11 SIGNATURES

The proposal must be signed with indelible ink or blue ink pen in the space provided by the person registered in the RUL or its authorized representative. The Bidder's/Proposer's electronic signature is authorized in the proposal presented. Lack of compliance with these requisites will constitute the **rejection** of the proposal. Bidders that are not registered in the RUL must submit forms **ASG 673** and/or **ASG 674** whichever applies.

2.12 CORRECTIONS, MODIFICATIONS, ALTERATIONS, OR PROPOSAL WITHDRAWAL

Proposals are open to correction, modification, or withdrawal only by following the dispositions in Article 7.4 of the Uniform Regulation No. 9230, *supra*.

Every proposal must be presented in legible, clear, complete, and precise form. Multiple proposals, varied or ambiguous, will not be considered. Any blot, deletion, annotation, or any other correction in the RFP must be endorsed by the **person who signs the proposal with his initials**. Otherwise, the proposal will be invalidated for the corresponding item or items.

The use of eraser ink for corrections will be considered a blot and **will have to include the initials of the person who signs the offer** to be considered. The use of correction paper to write on the proposal is unacceptable.

2.13 DOCUMENTS

All documents included as part of the RFP and those issued later, will form part of and must be included in the submittal of the proposals.

2.14 WARNINGS

- a. Providing any type of false, plagiarized, or fraudulent information or documentation as part of the information presented for this proposal will be sufficient cause to disqualify or reject any Bidder's/Proposer's proposal, as well as to cancel or terminate any purchase order or contract granted.
- b. ASG or the Bid Board can order the partial or complete cancellation of the RFP when it serves the best interests of the Government of Puerto Rico, regardless of the phase in which it is, as long as it is prior to the formalization of the contract, or a purchase order has been issued. Cancellations shall be notified by e-mail to all Proposers that have obtained an RFP packet, and an announcement will be posted in the RUS and ASG webpage.
- c. ASG may amend the RFP up to two (2) business day prior to the opening of proposal when the amendment entails additional changes or requests that must be included in the proposal, or one (1) business day before the opening of the bid when the amendment does not affect the presentation of proposal, if it serves the best interests of the Government of Puerto Rico.
- d. The award notice of this proposal shall not constitute the formal agreement between the parties. It shall be necessary to execute the corresponding contract or for the Administration to issue a purchase order signed by the authorized person.

- e. ASG or the Bid Board will not accept a bond for an amount less than that here established or issue to an Entity that is not 'Administración de Servicios Generales' or the 'Secretario de Hacienda'. Incompliance of these requisites will result in the rejection of the offer.
- f. ASG and the Bid Board grant faithful compliance with the public policy of preferential purchases provided by law.
- g. Any person who, in relationship with the agencies and other instrumentalities of the Government of Puerto Rico, participates in bids in RFPs, presents a proposal or is interested in perfecting contracts with them, will have the obligation to disclose all the necessary information so that the agencies can evaluate in detail the transactions and make correct and informed decisions. Any undisclosed relationship (conflict of interest) is grounds for immediate disqualification. Conflict of interest may be real, apparent or potential.
- h. ASG and the Bid Board reserve the right to do any of the modifications in the Instructions, Terms, Conditions, and Specifications of the RFP prior to the celebration of the Opening of Proposals. Any modification will be notified to the Proposers.
- i. ASG and the Bid Board reserve the right to engage in individual negotiations with Proposers, whose proposal are within the selection criteria defined in Section 7.4.18 of the Uniform Regulations No.9230, as amended, regarding the terms, conditions, quality, solution, prices, or combination of factors, to obtain the most advantageous price for the Government of Puerto Rico.
- j. The Government reserves the right to waive any minor format non-compliance and/or informalities of the submitted proposals if doing so is in the best interest of the government.

3 SPECIFICATIONS

The equipment and auxiliary services requested in this RFP are described in a separate document labeled "**Equipment Specifications and Services**", which is available on the ASG website in the folder titled **23J-09392**. The before mentioned "**Equipment Specifications and Services**" are hereby incorporated and made part of this RFP.

3.1 NOTICE TO PROCEED ORDERS

PRPA or its representative must issue official written Notice to Proceed (NTP) orders to purchase the Equipment and conduct the related services referenced in this contract. The NTP orders shall stipulate the Equipment specifications and the provision of services. Vendors are not authorized to deliver the Equipment and conduct the performance of any service outside written NTP orders provided by **PRPA** or its representative.

3.2 PERMITS, LICENSES, AND APPLICABLE LAWS AND REGULATIONS

Any and all permits required will be the Vendor's responsibility. Vendor must adhere to all federal, state, and municipal applicable laws, as well as FEMA and other federal policies in place at the time of contract activation. Contracts which costs are anticipated to be funded, in whole or in part, with federal funds shall comply with any term and condition specified by the awarding federal agencies. This include but is not limited to the requirements of 2 C.F.R. § 200.320, et seq. and 2 C.F.R. Part 200, and any applicable Office of Management and Budget (OMB) circulars. By submitting a proposal under this RFP, Proponent acknowledges and represents it is or will be able to comply with the federal terms and conditions that may apply, as described in **Attachment J**, Minimum Federal Terms and Conditions.

For any contract resulting from this RFP, compliance with 2 CFR Chapter 2, Part 200 et. al will be required. Links to the Regulation are listed below:

http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200_main_02.tpl

As a Federally funded activity, **23J-09392** activities must comply with all applicable federal laws, policies, and standards; noncompliance with this requirement may jeopardize the receipt of federal funds.

This RFP may be subject to the provisions set forth in the recently enacted Build America, Buy American Act (BABAA)¹. Inability to comply with BABAA at the Proposal Submission Deadline shall not prevent Proponents from submitting their proposals. To verify compliance with the BABAA or for Owner, at its sole discretion, to validate Proponents ability to compete in this RFP with the pertinent federal government agencies, all Proponents shall complete the form included in this RFP as **Attachment L**.

Vendors must follow the Uniform General Conditions for Public Works Contracts in Puerto Rico. Access to the full document is given through the following link:

<http://app.estado.gobierno.pr/ReglamentosOnLine/Reglamentos/7998.pdf>.

Liquidated Damages are determined as presented in **Attachment I** (Liquidated Damages), as identified in Regulation No. 9230.

Vendors will be solely responsible for any damages that may occur to people or property in the performance of work, be they accidental or due to negligence, and must fully repair and take all other necessary corrective actions required to resolve all damages or claims prior to submitting costs to **PRPA** for reimbursement. Unless adjudicated by a court of law, **PRPA** will be solely responsible for determining corrective actions and certifying that such actions are sufficient and appropriate. A certification from **PRPA** and/or the injured party is required to document and demonstrate that appropriate corrective actions were taken, and that the situation was resolved prior to payment.

The Vendor must have and maintain a valid and appropriate business license (if applicable), meet all local, state, and federal codes, and have current all required local, state, and federal licenses.

3.3 TAXES, PATENTS, LIABILITY, AND WORKERS COMPENSATION

Any and all federal, state, and/or municipal, payroll, and other taxes, patents, liability, and worker's compensation are the sole responsibility of the Vendor. The Vendors must comply and must make their sub vendors comply with all federal, state, and municipal requirements, as applicable. The Vendor understands that an employer/employee relationship does not exist under the awarded contract.

3.4 INDENMIFICATION

Upon contract award, Vendor agrees to protect, defend, indemnify and hold **PRPA**, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and

¹ <https://www.fema.gov/grants/policy-guidance/buy-america>

character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of the agreement resulting from this RFP and/or the performance hereof that are due, in whole or in part, to the negligence of the Vendor, its officers, employees, sub vendors or agents. Proponent further agrees to investigate, handle, respond to, provide defense for, and defend the same at its sole expense and agrees to bear all other costs and expenses related thereto.

3.5 ASSUMPTION OF INELIGIBLE OR UNAUTHOTIZED COSTS

The Vendor must be solely responsible for any and all costs incurred under this engagement that are the result of Vendor negligence, lack of adherence to the approved Equipment and services, purposeful or inadvertent damages to people or property (and any necessary or awarded costs to rectify same), or any other action or inaction that may result in costs being deemed in violation of law, regulation, or policy and/or being found ineligible for reimbursement by federal, state, or other sources. Said costs must not be billed to nor reimbursed by **PRPA**.

4 ELIGIBLE AND INADMISSIBLE OFFERS

4.1 PRICE QUOTATION UNIT

The offer must be done in dollars and cents. Offers expressed in terms of percent or undetermined prices will not be considered. In addition, and as supplementary information, Proposers are encouraged to present pricing tiers in the event of lower or higher unit consumptions. Proposal that does not include pricing tiers will be judge as an intend to bid a single price per item independent of quantities supplied.

4.2 INCOMPLETE OFFERS

If a Bidder/Proposer submits unit prices in some items and omits others, it shall be understood that the Bidder/Proposer is interested in bidding only in those items for which an offer was made.

If a bidder does not which to bid on an item, the Bidder/Proposer must annotate "N/A" (not applicable) or "N/B" (no bid).

4.3 UNRESPONSIVE OR UNACCEPTABLE PROPOSALS

The specifications set minimum requirements. However, when submitting the proposal, Proposers may present items that surpass the requested specifications, which might be selected if they offer the greatest value to the Government of Puerto Rico.

Ambiguous, in terms of its meaning, incomplete, and/or indefinite proposals will not be considered. Also, proposals that alter, infringe, vary, or condition the Terms, Conditions and Specifications established by the ASG will be rejected.

4.4 MANY PROPOSALS BY A SINGLE BIDDER/PROPOSER

If a Proposer presents multiple offers for an RFP, either in his own name or under pseudonyms, of any of its subsidiaries or branches, of one or more of its partners, agents or officers, every proposal submitted by the Bidder/Proposer will be **rejected**.

4.5 GLOBAL REJECTION

The Bid Board may reject all the offers or proposals received if these: (1) do not comply with the Instructions, Terms, Conditions, and Specifications; (2) the prices were unreasonable; or (3) there exists a collusion amongst the participating bidders.

4.6 CONFIDENTIALITY OF PROPOSALS

The ASG and the Bid Board will not disclose information indicated by the Bidder/Proposer in his proposal as confidential, proprietary, or privileged, or that is related to trade secrets, prices and proprietary or privileged information. All information considered by the Bidder/Proposer as confidential, proprietary, and privileged must be indicated as such in the proposal.

The Bid Board may reject proposals whose content is substantially marked as confidential, proprietary, or privileged. Providing any information marked confidential or proprietary will not prevent ASG or the Bid Board from disclosing such information if required by law. The contract ultimately awarded, and all prices set forth therein will not be considered confidential or proprietary, and such information may be made available to the public.

4.7 REDACTED COPY

All Proposers must submit a redacted copy of their proposal that excludes all confidential information that is not public. ASG reserves the right to release edited copies of proposals at the end of the RFP process. If a Bidder/Proposer does not submit a redacted copy, ASG will assume that the original copy of the proposal can be made public.

Therefore, the original copy of the proposal must identify all confidential information and the redacted copy of the proposal must exclude all confidential information that must not be public as described in section 4.6 of this document. Any information that is not identified as confidential in the uncensored proposal will be considered non-confidential.

4.8 OWNERSHIP OF THE PROPOSAL

All material submitted in response to this RFP will become the property of ASG and the Bid Board. The selection or rejection of a proposal will not affect this provision.

5 EVALUATION, SELECTION, AND AWARD

ASG and the Bid Board will review all qualified responses to this RFP and the Bid Board will select the proposal that it determines to be in the best public interest in accordance with the intent of this RFP. All proposals will first be screened for completeness and adherence to the requirements of this RFP. ASG nor the Bid Board will not consider substantively incomplete or non-responsive

proposals. A non-responsive proposal is a proposal that was not submitted in a timely manner, or that fails to meet the material terms and conditions of this RFP as determined by the Government.

The Bid Board and ASG reserves the right to waive any informality in any proposal and to accept any proposal which it considers to be in the best public interest, and to reject any or all proposals. The decision of the Bid Board and ASG in this regard will be final.

The Bid Board reserves the right to determine the suitability of proposals on the basis of a proposal complying with administrative requirements, technical requirements, the review team's assessment of the proposal and the expected performance of the services proposed, and cost.

5.1 EVALUATION CRITERIA

The Evaluation Committee, ASG and/or the Bid Board will score proposals based on criteria listed below in **Table 6.1.1**. Evaluation factors will include, but are not limited to, the following:

Table 6.1.1 Evaluation Score Breakdown

Criteria	Score
Cost Proposal	15
Firm Experience and Financial Capacity	15
Proposed Approach and Technical Capacity	60
Project Schedule and Milestones	10
Cost Proposal	15
TOTAL	100
Proposed Inclusion of Small, Minority, and Women-Owned Business (Preference Points)	5
GRAND TOTAL:	105

Project Schedule and Milestones: Proposed timeline to deliver the Equipment and complete the related services detailed in Section 4 of this RFP. The shorter the proposed timeline the higher/ points that will be obtained by the Proponent in this category.

Firm Experience: Points will be awarded based on the experience and qualifications of the Proponents, its sub-vendors and manufactures.

Financial Capacity: Points will be awarded based the Proponent's availability of financial resources to cover the proposal cost, and financial capacity its pay employees, sub vendors and manufacture (if applicable) throughout contract regardless of timing of payments.

Proposed Approach and Technical Capacity Points will be awarded taking into consideration the following:

- Proposal Term: Term for which the proposal shall be valid under the same terms and

conditions as submitted, which shall not be less than thirty (30) consecutive calendar days, and any potential cost increases after the proposed Proposal Term expires. Proposals with the longest Proposal Term will obtain higher points in this category.

- Efficiency: 3-point reduction for every 1% efficiency reduction below the highest (efficiency) acceptable proponent proposal. The most efficient engine gets full point value.
- Emissions: Emissions must meet the criteria specified. Points will be deducted for engines that produce higher emission levels and the reductions will be made based on the relative emissions reductions from the specified NOx rates. The engine with the best emission control performance will receive full point value.
- Load Acceptance and Load Rejections: Points will be based on the range of highest and lowest proposed MW/second from all proponent proposals.
- Footprint: Points assigned based on area required for Equipment at all levels.
- Maintenance Agreement Terms: Points will be based on a range of \$/MWh comparison of all proposals and must include all specified maintenance through the first major overhaul.
- Maintenance/Outage Duration: Points will be assigned based on the range of the duration required for the major overhaul outage. Higher points for a shorter duration.

Cost Proposal: Points will be awarded based on all the Proponent's terms and conditions in relation to the scope of the supply included in all the proposals that will be offered by all the Proponents to the Owner to evaluate the total cost of each proposal fairly and equitably. Points will be assigned based on a normalized (equivalent scope of supply) range for all proponent proposals established on the completed Cost Form included in **Attachment D** that shall be related to the Proponent's proposed approach to successfully deliver and install the Equipment, the related services detailed in this RFP and any potential cost increases after Proposal Term expires.

Upon completion of scoring, the Evaluation Committee will prepare an evaluation recommendation document with the signature of all Evaluation Committee members and submit it to the Bid Board for their review and evaluation. The Bid Board will make the final decision of award. All Proponents will receive a copy of the final determination.

At any point during the evaluation period, ASG reserves the right to contact Proposers for explanations about their Proposals. The purpose of these explanations is not to obtain additional information not originally submitted in the proposal, but rather to obtain a better understanding of the content provided.

5.2 PRICING PROPOSAL

The RFP packet shall include a Pricing Worksheet to be completed by Proposers. The Worksheet includes the technical specifications of each item requested, and an estimated unit consumption per item. Once completed, Proposers must export as a PDF document and include in the RFP documents for both physical and electronic submissions. The Pricing Worksheet template can be found under RFP 23J-09392 at <https://asg.pr.gov/subastas>.

Prices will be evaluated for reasonableness and fairness. However, it is possible that an award may not go to the Qualified Bidder/Proposer with the lowest price if, in the judgment of the

Government, a higher priced Bidder/Proposer offers the best overall value to the Government when also considering the technical requirements.

The pricing proposal must include the details of the offered price, such as per-unit price for each item, costs of transportation and delivery, among others. A total of fifteen points (15) will be awarded to the pricing proposal.

5.3 QUALIFICATIONS AND CAPABILITY

To determine which offer is the most convenient and beneficial, the price will not only be considered as the principal factor, but also the compliance with Terms, Conditions, Specifications, and Warranty required for the RFP. The Bidder's/Proposer's past performance and technical approaches will be considered by the Bid Board at the moment of awarding the "*buena pro*". The technical approach will be evaluated for the purposes of determining the Bidder's/Proposer's capability to satisfactorily comply with the requirements. It is possible to not grant an awarding to the Proposer that has presented a lower price if, in the judgement of the Bid Board or the ASG, the Bidder/Proposer proposes a higher price, but his proposal represents a value higher when also considering the technical requisites, delivery terms, past performance, warranty, among others.

The Bid Board will examine and evaluate all the offers presented before awarding the RFP. In any moment, during the evaluation period, the Board or the ASG may communicate with Proposers regarding the proposals, with the purpose of obtaining a better understanding of the content provided. These communications shall not include the disclosure of additional information that was not present originally in the proposal.

5.4 BEST AND FINAL OFFER EVALUATION

Upon analysis of all first-round submissions, the Bid Board may request a Best and Final Offer from all Qualified Proposers to allow them the opportunity to submit their last and most attractive pricing. Regulation 9230, *supra*, indicates the process and protocols of a Best and Final Offer Evaluation. The timeline for Best and Final Offer submission will be posted on ASG's webpage and communicated directly to all Qualified Proposers.

5.5 SELECTION

The pricing received in the Best and Final Offer will be re-evaluated to find an optimal scenario that meets the objectives of the RFP. The Bid Board will examine all proposals submitted before making an award.

The Bid Board shall award the responsive Bidder(s) or Proposer(s) whose follows the General Instructions, Terms, Conditions, and Specifications, and represents the best value to the Government of Puerto Rico.

5.6 AWARD

The award will be made to the proposal that represents the best value to the Government and is also in the best interest of the Government. The awards will be made by the Bid Board. The Bid Board reserves the right to accept other than the most financially advantageous proposal. The Bid Board reserves the right to accept or reject all proposals, to waive any informality in proposals, and unless otherwise specified in writing by the Proponent, to accept any items in any proposal. Since the Bid Board may choose to award a contract without engaging in discussions or negotiations, the proposal submitted must present and define Proponent's best offer for delivering the Equipment and performing the services described in this RFP.

The Bid Board may, at its discretion, require one or more Proponents to appear before the Evaluation Committee and the Bid Board for an interview or to make a presentation to clarify the contents of their proposal. During such interview, the Proponent may be required to present its proposal orally and otherwise, to respond in detail to any questions posed. Additional meetings may be held to clarify issues or to address comments, as deemed appropriate. Proponents will be notified in advance of the time and format of such meetings. The purpose of each meeting shall be to clarify and ensure understanding of the requirements of the contract; improve the technical aspects of the proposal in an effort to lead them to comply with the performance specifications and requirements and/or reduce the price; discuss the data that justify the price and the details pertaining to each proposal that can improve it.

The Proponents whose offers comply with the provisions established in the Proposal Package will be given fair and equal treatment regarding the opportunity to discuss and revise the proposals. However, as the information that is addressed in said meetings may vary in relation to each Proponent, the revisions and discussions shall be based on facts and circumstances particular to each proposal. The Proponent shall put into writing any substantive verbal clarification of a proposal. Should discussions and negotiations be held, the Auxiliary Administration of Acquisitions or the Bid Board may request that the Proponents whose proposals comply with the provisions of the Proposal Package submit amendments to the Proposals ("Best and Final Offer" or "BAFO") that respond to the discussions and negotiations that are conducted.

The commencement of such discussions, however, does not signify a commitment by **PRPA** or **ASG** to execute a contract or to continue discussions. **ASG** or the Bid Board may terminate discussions at any time and for any reason. A proposal may be rejected if it is incomplete. The Bid Board may reject any or all proposals and may waive any immaterial deviation in a proposal. Furthermore, the award notice of this proposal shall not constitute the formal agreement between the parties. It shall be necessary to execute the corresponding contract with **PRPA**.

More than one proposal from an individual, firm, partnership, corporation, or association under the same or different names, will not be considered. However, Proponents may submit one alternate proposal as part of their proposal, which varies in the proposed equipment and complies with the requirements described in this RFP. As the Bid Board may award a contract based on the initial proposal, a Proponent must make his initial offer on the most favorable terms available. The Bid Board reserves the right, however, to have discussions with those Proponents falling within a competitive range, and to request revised pricing offers from them and to make an award or conduct negotiations thereafter. The Bid Board may select and enter negotiations with the next most advantageous Proponent if negotiations with the initially chosen Proponent are not successful.

Once the Bid Board makes the corresponding award, they shall provide notice of their final determination by way of Ruling or Award Notice. The Award Notice shall be properly notified, by federally certified mail with acknowledgement of receipt or e-mail to all the parties that are entitled

to challenge such determination, namely, all the proponents who participated in the RFP process. The Award Notice must include: (i) the names of the Proponents that participated in the Request for Proposals or Request for Sealed Proposals and a summary of their proposals; (ii) the factors or criteria that were taken into account for the awarding of the proposal; (iii) the defects, if any, that the losing Proponents' proposals had, and (iv) the availability and the term for requesting an administrative and judicial review. The Bid Board must file the final determination of the award and a record of the Award Notice. The Award Notice shall not constitute the formal agreement between the parties. It shall be necessary to execute the corresponding contract for ASG or PRPA, as the case may be, to issue a purchase order signed by an authorized person.

It is the intent of **PRPA** to enter into a contract. Contents of the proposal must become contractual obligations if a contract ensues. Failure of the Proponent to honor these obligations may result in cancellation of the award. All processes are governed under the Puerto Rico Procurement Law 73 dated July 23, 2019, and all applicable federal rules and procedures.

5.7 ADMINISTRATIVE REVIEW

The party adversely affected by a decision of the Bid Board may, within a term of twenty (20) days from the deposit in the federal mail or email notifying the auction award, submit a request for review before the Management Review Board. General Services. Once the administrative review has been submitted, the corresponding Bid Board will submit a certified copy of the case file to the Review Board, within three (3) calendar days following the filing of the appeal.

The appellant shall provide notice with a copy of the request for administrative review to the adversely affected Administration and Bid Board; they shall simultaneously also provide notice to the provider that was awarded the bid. This requirement is of a jurisdictional nature. In the review document itself, the appellant shall certify to the Review Board its compliance with this requirement. The notice must be provided through certified mail with acknowledgement of receipt and e-mail. The appellant must provide notice, furthermore, to all the bidders that participated in the bidding process. In the case of Request for Proposals, they must notify the Auxiliary Administration of Acquisitions.

6 GENERAL CONDITIONS

6.1 TRANSPORTATION, HAULING, AND DELIVERY

The prices quoted must include the transportation and hauling expenses incurred up to the final delivery of the articles, equipment, or services in the place designated for the petitioner agency free of charge by the Government. Such cost should be clearly shown as separate from the unit cost of each item. Delivery cost must account for the entire Island, as well as Vieques and Culebra.

6.2 QUOTED PRICES

Every person must quote be based on fair prices for goods and services. Quality will be considered in the agreements for the supply of goods. The prices offered by the Bidder/Proposer will maintain fixed during the validity of the contracted awarded. These will not be subject to

changes due to market increases or any other nature, foreseeable or not. The quoted price shall include discounts offered due to prompt payment and volume requested.

6.3 DELIVERY TERMS

Deliveries shall be made within the term that the Bidder/Proposer has quoted, starting from the receipt of the purchase order. In addition, Governmental Entities may establish a delivery term in accordance with their needs.

6.4 STORAGE

In cases where it applies, Proposers must be responsible for all expenses related to the storage of products. The Government shall not be responsible for any taxes or fees associated with storage prior to delivery. The ASG reserves the right to perform preapproved and scheduled audits of storage and inventory at least once a year.

6.5 SAMPLES

In the case that the Bid Board requires equipment or quoted articles samples, the bidder shall have three (3) business day, starting upon the receipt of the application, to physically deliver said samples in original packaging. Non-compliant bidders will be **disqualified** from the RFP. Samples submitted for evaluation will be free of charge, and representative of the product offered and will be identified by row, item, type, quality, style, and size. Finalized the sample evaluation, the Bidder/Proposer will collect them, within ten (10) days after the verbal or written notification by the Bid Board. The ASG is not responsible of breaks or damages that may occur to the samples supplied while they are under evaluation or inspection.

6.6 QUANTITIES TO BE PURCHASED

The issued purchase order will indicate the specified quantities. Selected Proposer(s) shall honor the price proposed, including those listed in the price tiers if applicable.

6.7 WAY OF BILLING

All invoices for the collection of goods and services presented to the agencies, must contain the following certification:

Under penalty of absolute nullity, I certify that no public server (from the Government of Puerto Rico or indicate the name of the agency that issues the purchase order) is part or has any interest in the earnings or benefits as a result of the contract, has mediated a prior dispensation. The sole consideration in providing the goods or benefits of the contract has been the agreed with the agency's (that issues the purchase order) authorized representative. The amount of this invoice is just and correct, the works received, the products delivered, and the services have been provided and no payment has been received for them.

6.8 PAYMENTS.

It is the responsibility of the Selected Proposer(s) to follow the instructions detailed in Circular Letter 1300-07-17, which describes direct deposit enrollment procedure. Once enrolled, payment will be processed in accordance with the provisions of the Circular Letter 1300-02-10 of the Department of Finance, which states that “the responsibility of the agencies to demand the provider the delivery of the invoices in or before ten (10) days after the finalization, period, or date of delivery of the good or service.”

6.9 PREFERENCE POLICY.

In any procurement, the ASG will comply thoroughly with the following preference policies, enshrined in the following legal provisions:

- a. Act 14-2004, as amended, known as the “Act for the Investment in the Puerto Rican Industry”;
- b. Act 129-2005, as amended, known as “Law of Reserves in Purchases of the Government of the Commonwealth of Puerto Rico”;
- c. Act 253-2006, known as the “Law of Multiple Selection Contracts in the Procurement Process”;

The ASG will thoroughly comply with the determined measure that secures the compliance with the public policy cited above and all other public policy disposition that stimulates and encourages the companies of local capital to increase business opportunities, with the purpose of creating more and better employment for the citizens.

- a. USE OF PERCENT OF PREFERENCE: The Bidder/Proposer interested in the recognition of the percent (%) of assigned preference, will present a valid resolution awarded by the Investment in the Puerto Rican Industry Board, by the Trade and Export Company of Puerto Rico or any other governing body, together with his offer in order to validate his preference.
- b. TRANSFER OF THE PERCENTAGE OF PREFERENCE: The company that obtains the percent of preference by concept of **manufacturing** for any of the products, can transfer its agents established in Puerto Rico through a notarized letter expressly indicating that it is transferring to each agency the percent granted for said product by the Investment in the Puerto Rican Industry Board or any other governing body. Mentioned letter must be approved and sealed with the Government Entity’s official seal that issues it.
- c. APPLICATION OF THE PERCENT OF PREFERENCE: In the case that after the percent of preference has been applied the articles result in equal conditions, the award will be made in the following order: (1) products from Puerto Rico; (2) products from the United States; and (3) foreign products.
- d. UPDATED ISSUED RESOLUTION: In any purchase made under a contract or purchase order as a product of this RFP, the bidder must obtain a percent (%) preferential to his products, and must present at the time of the purchase, the valid resolution issued by the Investment in the Puerto Rican Industry Board, by the Trade and Export Company of Puerto Rico, or any other governing body. If the bidder does not present the current resolution, he will not be able to enjoy the benefits of said laws.

Proponent seeking M/WBE preference should provide a copy of their M/WBE certification to evidence their status. ASG shall provide a preference of up to five (5) additional points in the evaluation

criteria of the method of rating proposals, for participation of M/WBE Registered Puerto Rico Business. **Businesses providing evidence and proof of these certifications completed and approved by SBA, MBDA, EPA or DOT will be formally acknowledged as Minority or Women Owned Business Enterprises for the purpose of assigning preference points in the evaluation of proposals.**

Nothing herein shall require **PRPA** to award contracts for services or procurements to a minority and/or women-owned business enterprise that is not also a qualified, responsive and responsible Vendor.

6.10 BONDS AND WARRANTIES

- a. **BID BOND:** The bid bond shall be a provisional support provided by Proposers for the purpose of assuring the Government of Puerto Rico that he will sustain his bid throughout the RFP procedure. **The bond must be original.** If presented through an insurance company, the bond will be in favor of 'Administración de Servicios Generales', and if presented by certified check or money order, the bond will be in favor of the 'Secretario de Hacienda'. **This RFP requires a bid bond of five percent (5%) of the proposal price.** Any offer presented without the bid bond here arranged will be rejected.
- b. **PERFORMANCE BOND:** Selected Proposer(s) must post a performance bond to the Bid Board, no later than ten (10) business days following the notification of the award. Such bond shall secure the performance of the contract or purchase order, as applicable. The amount of the bond shall be one hundred percent (100%) of the Equipment Price to secure fulfillment of all the vendor's requirements under such contract. The Bid Board shall reimburse the bond when the term of the contract expires or when the corresponding purchase order is complied. The bond will guarantee that the supplier complies with the obligation in accordance with the terms and conditions of his proposal. In the case of non-compliance and the need to go to the next supplier, the price difference will be covered by this bond. The bond must be original. If presented through an insurance company, the bond shall be in favor of 'Administración de Servicios Generales'; and if presented by certified check or money order, the bond will be in favor of the 'Secretario de Hacienda'.
- c. Vendor must furnish a **Payment Bond** in the amount of one hundred percent (100%) of the Equipment Price to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.
- d.
- e. **WARRANTY:** Proposers must specify period(s) of Warranty per item, as applicable, as part of their proposal.

6.11 INSURANCE REQUIREMENTS

The Proponent agrees that if selected, upon contract award and at Proponent's sole expense, Proponent must procure and maintain the following minimum insurances with insurers authorized to do business in Puerto Rico and provide insurance required by **PRPA** or the regulatory agency that granted the funds:

- A. All insurance policy must be endorsed, specifically or generally, to include the following as

Additional Insured and a with a Hold Harmless:

PRPA, COMMONWEALTH OF PUERTO RICO, OFFICE OF THE GOVERNOR, ITS OFFICERS, AGENTS AND EMPLOYEES, AND AEROSTAR AIRPORT HOLDINGS, LLC.

- B. Minimum insurance amount of \$5,000,000 for Commercial General Liability, including Products-Completed Operations Aggregate. An umbrella may be utilized to reach the aforementioned limit.
- C. Minimum insurance amount of \$1,000,000 is required for each of the following types of insurance policies required:
- Automobile Liability
 - Worker's Compensation and Employer's Liability
- D. Before commencement of any work or event, Proponent must provide a Certificate of Insurance in satisfactory form as evidence of the insurances required above.
- E. Proponent must have no right of recovery or subrogation against **PRPA or Aerostar** (including its officers, agents, and employees), it being the intention of the parties that the insurance policies so affected must protect both parties and be primary coverage for any and all losses covered by the above-described insurance.
- F. **PRPA** and Aerostar must have no liability with respect to Proponent's personal property whether insured or not insured. Any deductible or self-insured retention is the sole responsibility of Proponent.
- G. Notwithstanding the notification requirements of the Insurer, Proponent hereby agrees to notify **PRPA's** Insurance Manager within two (2) days of the cancellation or substantive change of any insurance policy set out herein. **PRPA**, in its sole discretion, may deem failure to provide such notice as a breach of this Agreement.
- H. The Certificate of Insurance must note in the Description of Operations the following:

Agency: _____
Contract #: _____

- I. Insurance procured by Proponent must not reduce nor limit Proponent's contractual obligation to indemnify, save harmless and defend **PRPA and Aerostar** for claims made or suits brought which result from or are in connection with the performance of this Agreement.
- J. If Proponent is authorized to assign or subcontract any of its rights or duties hereunder and in fact does so, Proponent must ensure that the assignee or sub vendor satisfies all requirements of this Agreement, including, but not limited to, maintenance of the required insurances coverage and provision of certificate(s) of insurance and additional insured endorsement(s), in proper form prior to commencement of services.

Any failure of **PRPA** to demand or receive proof of insurance shall not constitute a waiver of Proponent's obligation to obtain the required insurance. The receipt of any certification does not constitute an agreement by **PRPA** that the insurance requirements in the contract have been fully met or that the insurance policies indicated on the certificate complies with all contract requirements. **PRPA** reserves the right to modify, delete, alter, or change insurance requirements at any time.

6.12 LATE DELIVERIES

Any Bidder/Proposer who fails to deliver the merchandise or services, will be charged 0.5 per cent of the issued purchase order for each day that elapses in delay, for a maximum of 10%, without constituting a waiver of any other procedure that is applicable by law. Furthermore, such Bidder/Proposer could be penalized with an earlier termination of the contract. It is understood that there is a delay when the supplier does not meet the agreed delivery date or does not meet the date of the commencement of services.

6.13 NON-COMPLIANCE.

The ASG Administrator reserves the right to cancel any contract or purchase order granted by virtue of this bidding process at any time when this results in the protection of the public interest and/or the benefit of the Government of Puerto Rico.

Moreover, Selected Proposer(s) who do not comply with any of the RFP's terms and conditions, once issued the purchase order or signed the contract, shall be imposed the following penalties: (1) confiscation of performance bond, (2) charging the difference of a price paid due to the need for ASG to make an exceptional purchase of goods, and (3) exclusion from the RUL for a period determined by ASG Administrator, in accordance with provisions of Regulation No. 9230, *supra*. Also, the ASG reserves the right to apply to any of the sanctions, as provided in the aforementioned Regulation, in Law 73-2019, as amended, as well as those agreed in the contract or purchase order. The measures to be taken in case of non-compliance will be imposed only by the ASG, after investigation of the facts, mediating communication and giving the bidder due process of law.

6.14 INVESTIGATIVE COLLABORATION

Every person, Bidder, Proposer, or contractor shall collaborate with any investigation initiated by the Government on business transactions or the granting of contract or granting of governmental incentives, of which they were part of or directly or indirectly benefited.

6.15 ANTI-DISCRIMINATION CLAUSE

The ASG does not discriminate on the basis of race, color, gender, origin or social condition, political or religious ideas, age, nationality, for being a victim or being perceived as a victim of sexual assault or stalking, veteran status, identity or real or perceived sexual orientation, physical, mental or sensory impairment.

6.16 COMMUNICATIONS AND ANNOUNCEMENTS

Communications with any Government representatives in respect to any matter related to the content of this RFP will require approval or be completely prohibited during the process of selection and proposal presentations, except when contacted by ASG or the Bid Board for explanations, as described in Section 1.5. Non-compliance with said restriction may result in the rejection of the offer. All communication will take effect through the following email address: juntadesubastas@asg.pr.gov.

Any information or public announcement related to this RFP will be made through ASG's web page (<https://asg.pr.gov/subastas>) All information, public announcement, or amendment related to this RFP will be written with the ASG and Bid Board due authorizations.

6.17 RFP INVITATION OBJECTION

In the case that a Bidder/Proposer interested in participating in a bid process disagrees with the RFP Invitation, he will be able to settle personally before the ASG Procurement Area's Auxiliar Administrator the corresponding objection document, within **three (3) business days** following the date the Administration makes accessible the RFP Invitation. All objections to the RFP Invitation that fall outside the here established term will be rejected. The objection must comply with the established Regulation No. 9230, *supra*.

6.18 RFP DOCUMENT OBJECTION

In the case that a Bidder/Proposer interested in participating in a bid process disagrees with the established final terms, instructions, specifications, or conditions in the RFP Document, he will be able to settle personally before the ASG Procurement Area's Auxiliar Administrator the corresponding objection document, within **three (3) business days** following the date the Administration makes accessible the RFP Document. All objections to the RFP Document that fall outside the here established term will be rejected. The objection must comply with the established Regulation No. 9230, *supra*.

7 CONTRACT WITH "ADMINISTRACIÓN DE SERVICIOS GENERALES"

7.1 FORMALIZATION OF THE CONTRACT.

The proposal of the Selected Proposer(s) and the provisions of the RFP will constitute the base for finalizing the contract between the Selected Proposer(s) and PRPA. The contract will be formalized as soon as the ASG receives the guarantees required from the bidder.

7.2 CONTRACT RENEGOTIATION.

The prices proposed by the bidder will remain fixed during the validity of the contract, in accordance with the RFP's quote and award, and will not be subject to changes due to market fluctuations, independently of its predictability, unless otherwise agreed to.

7.3 REFUSAL TO FORMALIZE THE CONTRACT.

If the Selected Proposer(s) refuses to formalize the contract or does not attend to sign it, within the term notified in the Notice or Award Resolution or by the Contract Unit of the Procurement Area of ASG and has not presented a reasonable prior excuse, he will not be considered to be part of the ASG contract. The ASG Administrator may apply provisions contained in Section 9.1.4 of the Regulation No. 9230.

7.4 SCOPE OF THE CONTRACT.

The contract awarded under the RFP will cover the requesting agency or governmental and exempt entities of the Government of Puerto Rico, as defined in Law 73, *supra*. The Selected Proposer(s) may not refuse to offer the services to any agency, governmental and exempt entities, or municipalities, among others.

7.5 INSTRUCTIONS FOR THE USE OF THE CONTRACT

When the RFP is awarded by the ASG Bid Board, the Procurement Area will formalize a contract between the parties. The ASG will guide Purchasing Delegates and Sub-delegates on the use of the contract through the "Contract Use Instructions", which include the terms and conditions indicated in the bidding specifications and the price table.

7.6 FOMB CONTRACT REVIEW

All contracts resulting from this RFP are subject to review by the FOMB in accordance with FOMB contract review policy and related amendments. Please refer to the FOMB Contract Review Policies available at <http://juntasupervision.pr.gov/documents/>.

7.7 TERMINATION CLAUSES

Proponent acknowledges the following failure to provide the Equipment.

A. Failure to provide the Equipment

If the Vendor fails to provide the Equipment and any related services described in the contract or fails comply with the terms and conditions of this contract contained therein, shall constitute sufficient cause to terminate the contract without the need for prior notification. In addition, **PRPA** and ASG reserves the right to cancel any contract or purchase order granted by virtue of this procurement process at any time when there is just cause and this results in the protection of the public interest and/or the benefit of the Government of Puerto Rico.

The Vendor will have a First Notice to Cure, including the submittal of a To Cure Plan within 3 days after notice, followed by 7 days to cure the default period.

If said default cannot be cured within the First Notice to Cure period, a second 7 days' written Notice to Cure will be issued to the Vendor.

If default is not cured following the Second to Cure period, **PRPA** or ASG may demand its own timetable or terminate the contract.

B. Authority to Terminate

PRPA Executive Director is authorized to terminate the awarded contract on behalf of **PRPA**. ASG Administrator is authorized to cancel the awarded contract resulting from this RFP on behalf of ASG.

C. Termination for Convenience

PRPA must have the right to terminate the contract without cause and at its convenience, with immediate written notice to the Vendor.

D. Force Majeure

It is mutually understood and agreed that the contract holder must be waived of its obligations under the contract during any period or periods of time when acts of God, war or public enemy render impossible its performance under the contract. In such case, the contract holder must give **PRPA** prompt oral notification followed by written notice of the and estimated duration of said Force Majeure.

E. Law to Govern

The parties acknowledge that the contract is made and entered in Puerto Rico and will be performed in Puerto Rico. The parties further acknowledge and agree that Puerto Rico law must govern all the rights, obligations, duties and liabilities of the parties under contract and that Puerto Rico law must govern the interpretation and enforcement of the contract and all legal matters relating to the contract. The parties further agree that all legal actions proceeding relating to the contract must be brought in a court of competent jurisdiction in San Juan, Puerto Rico. By executing the contract, the parties submit to the jurisdiction of said courts and hereby irrevocably waive all objections that they may have with respect to venue in any court sitting in San Juan, Puerto Rico.

In addition, the Secretary of the Government of Puerto Rico shall have the power to terminate this Agreement at any time, as provided in Memorandum No. 2017-001; Circular Letter 141-17 from the Office of the Secretary of the Government of Puerto Rico and the Office of Management and Budget.

ATTACHMENTS

Attachment A: Proponent Proposal Checklist

Proponent Proposal Checklist
Request for Sealed Proposals
RFP 23J-09392

Proposals shall incorporate the following documents in the order provided. The forms included as part of the RFP must be completed and incorporated as part of the Proposal. ASG reserves the right to reject any Proposal that does not fully satisfy these requirements. Proponent shall mark their initials in the space provided below to indicate the compliance with the Checklist's requirements.

Initials	Document Description
	One (1) Sealed Physical Proposal (Office Secretary Bid Board); and One (1) Electronic copy of Proposal; or One (1) Redacted copy of Proposal (if applicable).
	Attachment A – Proponent Proposal Checklist duly initialized and signed.
	Attachment B - Addenda Acknowledgement duly completed and signed.
	Cover letter (2 pgs.): Overview of the key elements of Proposal and why Proponent should be selected duly signed. Must include Proponent identification, RFP information, and point of contact information.
	Business Profile: Business profile establishing the experience, past performance, and demonstrated ability of the firm to comply with delivery and installation of the Equipment specified in this RFP. Must also include the following information or documents: <ul style="list-style-type: none"> - Organizational Chart of the Business - Registered Organizational Documents - Professional Business licenses and credentials
	Attachment C – Comparable Project Fact Sheet: List of 3 comparable sales of Equipment
	Firm Financial Capacity: Include summary that demonstrates firm's adequate financial resources to cover the cost proposal specified in Attachment D, and the financial capacity to pay employees and subvendors (if applicable) throughout contract regardless of timing of payments. Must also include: <ul style="list-style-type: none"> - Most recent Audited Company Financial Statements.
	Equipment Fulfillment Narrative General description of how Vendor proposes to provide the Equipment and the related services specified in this RFP. Any proposed contracting of a subvendor or manufactures must be identified in this section by detailing sub name, experience and role to play.
	Delivery Schedule
	Attachment D - Cost Form
	Attachment H - Bid Bond Form

Initials	Document Description
	Attachment F – Proponent’s Good Standing, Limited Denial of Participation (LDP)/Suspension or Debarment Status, legal Issues, Ownership Structures, and Conflicts duly signed with corporate seal.
	Attachment G – Lobbying Certification of Contracts, Grants, Loans, and Cooperative Agreements duly signed.
	Attachment K –Proponent Certification Requirement duly signed.
	Attachment L – Build America, Buy America Act Form duly signed.
	First-Tier Sub vendor and Manufacture Information (if applicable): Including company experience, qualifications, role and approach to perform Equipment Specifications and Services identified in the RFP.
	Attachment M - Sourced Critical System Components

Name of Proponent

Proponent's Authorized Representative Signature (If Corporation, Signed and Sealed)

Date

Attachment B: Proponent Summary and Addenda Acknowledgment

PROPONENT SUMMARY INFORMATION

Proponent Organization	
Name of Proponent Organization:	
Proponent Universal Identifier Code from SAM:	
Proponent Point of Contact Information	
Name:	
Title:	
Email address:	Telephone:
Postal Address:	
RFP Information	
RFP Number:	RFP Submission Deadline Date and Time:

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

The Proponent hereby acknowledges that he/she has received and read all the responses to all of the Proponents questions summarized in the **Request for Clarification Response Document**.

The Proponent, hereby acknowledges that he/she has received and that he/she has considered in the preparation of his/her proposals, all requirements in the following **Addenda to this Proposal/ Contract**:

ADDENDUM NUMBER	DATE OF ADDENDUM	ACKNOWLEDGEMENT (Initial)

☐ NO ADDENDUM WAS RECEIVED IN CONNECTION WITH THIS
BID/PROPOSAL/CONTRACT.

ACKNOWLEDGEMENT:

Name of Proponent or Vendor

Proponent's Authorized Representative Signature (If Corporation, Signed and Sealed)

Date

IMPORTANT NOTICE:

THIS FORM MUST BE COMPLETED AND SUBMITTED BY ALL PROPONENTS. IF NO ADDENDA IS RECEIVED, CHECK THE "NO ADDENDUM" BOX ABOVE AND SIGN THE ACKNOWLEDGMENT.

ASG RETAINS THE ABSOLUTE RIGHT TO REJECT ANY PROPOSAL THAT FAILS TO INCLUDE THIS ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA.

Attachment C: Comparable Fact Sheet

Instructions: Complete the following form for each of the three comparable Equipment sold and installed by Proponent that are similar to the Equipment and related services specified in this RFP. Forms shall not exceed three (3) pages per Equipment described by Proponent. Any information that exceeds the stated page limit will not be considered.

Proponent Information		
Proponent Company Name:		
Role:		
<input type="checkbox"/> Primary or General Vendor	<input type="checkbox"/> Sub vendor	<input type="checkbox"/> Joint Venture
<input type="checkbox"/> Other, specify:		
Equipment Details		
Equipment:		
Location where the Equipment was installed:		
Reference Information of Equipment Buyer		
Company Name:		
Point of Contact Name:		
Title:	Phone:	Email:
Date Equipment was sold:		
Date Equipment was installed:		
Original Contract Amount (\$):		
Final Contract Amount (\$):		
Contract Term:		
Equipment Purpose and Worked Performed		
<p>Narrative description of the equipment sold, and the related services provided, which are similar to the Equipment. Make sure to identify work completed by proponent, the work subcontracted, and the work performed by others)</p>		

Attachment D: Cost Form

The undersigned, having familiarized himself with the difficulties and restrictions of the Equipment's site and facilities and all related conditions affecting the cost of the work, in accordance with requirements and stipulations indicated on Instructions to Proponents, Equipment Specifications and services, Attachments, any other terms and conditions and all related Addenda, as part of this RFP; hereby proposes to furnish all labor, materials, and tools to deliver the Equipment and its related services, as required by the RFP; for the pricing indicated below of:

Base Proposal:	Engine Generator Package, including fabrication, testing, delivery FOB Job Site (or FOB Destination), startup, commissioning, and site support services as specified herein.	\$ _____ \$ _____
	Pricing for oversized generator to allow future operation on natural gas.	\$ _____/5 Year Pricing Term
	Pricing for Vendor-recommended Long Term Service Agreement (LTSA): Proponent to include detailed description of included services. 5-year term required.	\$ _____
	Pricing for one (1) set of recommended special tools to support on-site maintenance of engine generator Package; Proponent to furnish priced list of included items.	\$ _____
	Pricing for 2 years of recommended spare parts (normal operation), including expendables; Proponent to furnish priced list of included items.	\$ _____/Yr/Mo
	Pricing for remote monitoring service and associated hardware/software.	
		(Submit rate schedule)
	Unit pricing for additional site assistance hours beyond those included in base proposal.	
	Price factors that will be used by Proponent to calculate price increases after Proposal Term expires.	(Submit calculation with allocation to each price factor considered by Vendor)

**Proposal
Term:**

PRPA requests the longest practical proposal terms to facilitate necessary approvals for contract execution, purchase, and disbursement of funds. Proponent shall provide estimated and reasonable cost changes should the PRPA not be able to execute the contract, purchase the equipment and/or remit payment before proposal term expiration. The estimated and reasonable increments will be considered as part of the evaluation and selection criteria. Notwithstanding, the Proponent is expected to provide justification of any change in price based on cost indexes from reliable industry sources. Failure to provide sufficient justification of increment in price may result in Proposal rejection and award to next ranked Proponent.

Notwithstanding cost increments will not be applied automatically and the awarded Proponent will be required to document the reasonableness of such changes based on cost indexes from reliable industry sources and any other applicable factor, when and if any such cost increment shall take place after the execution of the contract/purchase order.

In submitting this proposal, it is agreed that the Proposal, may not be withdrawn for a period of
(Please, include number of days) _____ consecutive calendar days, from the date of opening thereof.

Name of Proponent

Proponent's Authorized Representative Signature (If Corporation, Signed and Sealed)

Date

Attachment E: General Site Information

Guarantee Point, °F DB/ °F WB	80.8 / 76
Site Elevation / FT	8
Site Barometric Pressure / psia	14.69
Seismic Importance Factor	1.5
Record High Dry Bulb Temperature	98.4
Record Low Dry Bulb Temperature	61.2
Summer Cooling Dry Bulb, 0.4% ASHRAE	91.6
Maximum Indoor Temperature, °F	107
Minimum Indoor Temperature, °F	61.2

WIND LOAD INFORMATION

Basic Wind Speed (3 second gust/fastest mile) MPH	174
Risk Category	IV
Exposure	D
Internal Pressure Coefficient	CGpi = +/- 0.55 (Partially Closed)

SEISMIC LOAD INFORMATION

Risk Category	IV
Seismic Importance Factor	1.5
Mapped Spectral Response Accelerations	Ss = 0.981, S1 = 0.39
Site Class	D
Spectral Response Coefficient	Sds = 0.784, Sd1 = 0.39
Seismic Design Category	D

Attachment F: Proponent's Good Standing, Limited Denial of Participation (LDP)/Suspension or Debarment Status, Legal Issues, Ownership Structures, and Conflicts

FROM: _____

Name of Proponent: _____

Proponent Authorized Representative: _____

Mailing Address: _____

Contact Telephone: _____

The Proponent certifies to the best of its knowledge and belief, that it and its Officers, Directors, and Partners of proposing entities:

- (a) are in Good Standing with any and all Federal, State and local agencies that has or had a contractual relationship with the Proponent or any of its Officers, Directors, and Partners of proposing entity;
- (b) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal, State, and local department or agency;
- (c) have not within a three-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (d) are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; including PR Law No. 2 of January 4th, 2018, as amended.
- (e) have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default; and/or
- (f) Proponent does not and will not have any actual, apparent and potential conflicts; overlapping ownership interests of Directorship in other participating Vendors' firms or entities; ownership interests or participation in a Design, Construction or Private Management Agent for any of the projects to be awarded for the services to be provided under this project.

Certified: _____

Name of Proponent: _____

Proponent's Authorized Representative Signature (If Corporation, Signed and Sealed)

Date: _____

Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective Proponent must attach an explanation to this proposal.

Attachment G: Lobbying Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned must complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned must require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients must certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification must be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Proponent, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Vendor understands and agrees that the provisions of 31 U.S.C. § 3801 *et seq.*, apply to this certification and disclosure, if any.

Name of Proponent

Proponent's Authorized Representative Signature (If Corporation, Signed and Sealed)

Date



Attachment I: Liquidated Damages

As specified in Regulation No. 9230, Uniform Regulation for Purchases and Proposals of Goods, Works, and Nonprofessional Services of the General Services Administration of the Government of Puerto Rico:

The sum to pay for delay in the delivery and installation of the Equipment or a shortfall in performance in no way represents a penalty but does represent damages agreed between both parties to compensate the Government for additional expenses and other setbacks. Vendor agrees that the harm caused by the failure to complete and deliver any of the goods in accordance with the schedule and any other delivery schedule set forth in the Contract is incapable or difficult to estimate; therefore, as a reasonable estimate of just compensation for any such failure, Vendor agrees that PRPA (at their option) may: (a) collect from Vendor or (b) reduce the amount PRPA owes to Vendor by the following:

1. The amount of \$1,000.00 per engine for each calendar day not to exceed a total of 4% of the Contract total, after the date such goods are proposed to be delivered, until the date all of the goods are inspected and received by PRPA.
2. The amount of \$10,000 per engine for each full 10 BTU's (HHV) of excess fuel consumption per kWh over and above the guaranteed consumption, as ascertained during completion of the performance test procedure described in the Specifications and corrected to guarantee conditions, not to exceed one hundred thousand dollars (\$100,000) per engine. The deviation from the guaranteed heat rate shall be calculated based on the arithmetic average of the percentage deviations (excessive or short) as evaluated for the individual loads subject to guarantee.
3. The amount of \$12,000 per engine for each full one percent (1.0%) shortfall of the guaranteed output, net of Vendor-furnished package auxiliaries, by which the output of the reciprocating engine generator, as ascertained during the performance test procedure described in the Specifications and corrected to guarantee conditions, not to exceed one hundred thousand dollars (\$100,000) per engine.
4. The amount of \$10,000 per engine for each full one percent (1.0%) of excess NOx emissions over and above the guaranteed emissions, as ascertained during completion of third-party emissions testing, not to exceed one hundred thousand dollars (\$100,000). Alternatively, Owner may at its discretion require the Vendor to perform repairs, modifications, and/or equipment replacement necessary to achieve the guaranteed emissions levels.
5. The amount of \$10,000 per engine for each full one percent (1.0%) of excess CO emissions over and above the guaranteed emissions, as ascertained during completion of third-party emissions testing, not to exceed one hundred thousand dollars (\$100,000). Alternatively, Owner may at its discretion require the Vendor to perform repairs, modifications, and/or equipment replacement necessary to achieve the guaranteed emissions levels.

Performance guarantees shall apply only to the extent that the engines are operated in substantial accordance with Vendor's material specifications, procedures, and guidelines. Further, such guarantees shall apply only if the testing procedure is completed within a reasonable time, not to exceed ninety (90) days after initial operation, unless otherwise stated in the Specifications. Vendor's liability with regard to liquidated damages for delay in delivery, excess fuel consumption or a shortfall in output shall be limited to a cumulative maximum of one million, two hundred thousand dollars (\$1,200,000) and, to the extent that the Owner is authorized by the laws of the Commonwealth of Puerto Rico, shall constitute Owner's sole remedy with regard to delay and non- achievement of guaranteed values.

**Attachment J: Minimum Federal Terms and Conditions**

All Proponents shall comply with the following laws and regulations, as applicable to the Equipment and related services described in this RFP:

1. **Clean Air Act and the Federal Water Pollution Control Act** – Contracts of amounts in excess of \$150,000.00 must contain provisions that requires the vendor to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. §§7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. §§ 1251-1387)
2. **Byrd Anti-Lobbying Amendment** – Vendors that apply or proposal for an award of \$100,000.00 or more must file the required certification. (31 U.S.C. § 1352, as amended); (44 C.F.R. Part 18)
3. **Buy American Act of 1933** – To the extent applicable, Vendor shall comply with the Buy American Act in the purchases of goods (articles, materials or supplies) valued over \$10,000.00. (41 U.S.C §8301 et seq.)
4. **Contract Work Hours and Safety Standard Act** – Where applicable, this act requires compliance with 40 U.S.C. § 3701 et seq. to all FEMA grants that involves the employment of mechanics and laborers, which include watchmen and guards.
5. **Davis-Bacon and Related Acts** – To the extent applicable, Vendor shall comply with the prevailing wage requirements applicable to construction, alteration, or repair of public buildings or public works. (29 CFR Parts 1, 3 and 5)
6. **Copeland Anti-kickback act 40 U.S.C. 3145** - The Vendor or Sub-recipient will comply with the Copeland Anti-kickback Act (40 U.S.C. 3145). By this means the Vendor acknowledges and certify that will not induce any person employed in the construction, completion, or repair of any public work, to give up any part of the compensation to which he or she is otherwise entitled.
7. **Solid Waste Disposal Act** – To the extent applicable, Vendor will comply with regulations related to waste management and disposition in a manner that maximizes energy and resource recovery. (42 U.S.C. §6002 et seq.)
8. **Age Discrimination Act of 1975** – No person in the United States shall, based on age, be excluded from participating in, be denied the benefits of, or be subjected to discrimination under, any program or activity receiving federal financial assistance. (42 U.S.C. § 6101 et seq.)
9. **Rehabilitation Act of 1973** – Vendors will not discriminate against any employee or applicant for employment solely because of physical or mental handicap for which the employee or applicant is otherwise well qualified. (29 U.S.C. § 701 et seq.)
10. **Civil Rights Act of 1964** - No person in the United States shall, on the grounds of race, color or national origin, be excluded from participating in, be denied the benefits of, or be subjected to discrimination under, any program or activity receiving federal financial assistance. (42 U.S.C § 1971, et seq.)
11. **Energy Efficiency** – The Vendor agrees to comply with the requirements of 42 U.S.C § 6201 which contain policies relating to energy efficiency.
12. **Compliance with the United States Office of Management and Budget** – Vendor agrees to comply with the regulations, policies, guidelines and requirements related to the use of federal funds under the contract.
13. **Compliance with Laws, Regulations and Executive Orders** – The Vendor acknowledges that FEMA or other federal financial disaster funds will be used to fund work under the RFP and the resulting contract. The Vendor shall comply with all applicable Federal and Puerto Rico Government laws, regulations, executive orders, policies, procedures, and directives, including but not limited to the Puerto Rico Anticorruption Code, all Federal Cost Principles set forth in 2 C.F.R. Part 200, and all applicable FEMA



regulations in 44 C.F.R. Chapter 1.

14. **Record retention and access to records** – The Vendor and the Agency shall afford any authorized representative of NGB, DoD or the Comptroller General of the United States access to and the right to examine all records, books, papers and documents that are parts of this contract. The Agency and the vendor agree to comply with the record retention and provide, as is required, all intact record for at least ten (10) years following closeout of the award.
15. **Debarment and Suspension; EXECUTIVE ORDERS 12549 and 12689** – The Vendor agrees to comply with *2CFR Part 180* by certifying that neither it, sub vendor nor its principals or its affiliates are excluded or disqualified from the Excluded executed Parties List System (EPLS) or the System for Awards Management (SAM), at the current OMB website. This certification is a material representation of fact upon which the agency relies in entering this contract. The Vendor will include a provision requiring such compliance in its lower tier transactions. This verification shall be documented on the Contract File and shall be subject to audit (*31 U.S.C. 1352*). The Vendor and/or Proponent will provide the required certification as part of the proposal and the contract.
16. **Central Vendor Registration** – The parties agree to comply with the System for Award Management (SAM) and Data Universal Numbering System (DUNS) Requirements.
17. **False or Fraudulent Statement of Claims** – The Vendor acknowledges that 31 U.S.C. Chapter 38, applies to its actions pertaining to this contract. The Vendor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to this contract. The Vendor agrees to include the above language in each subcontract under this contract, modified only to identify the sub vendor that will be subject to these provisions.
18. **Energy Policy and Conservation Act** – The Vendor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the State Energy Conservation Plan issued in compliance with the Federal Energy Policy and Conservation Act.
19. **No Obligation by Federal Government** – The federal government is not a party to this contract and is not subject to any obligations or liabilities to the Agency, vendor, or any other party pertaining to any matter resulting from this contract.

20. Privacy Act

The Vendor agrees to:

- a. Comply with the Privacy Act of 1974 (the Act) and the agency rules and regulations issued under the Act in the design, development, or operation of any system of records on individuals to accomplish an agency function when the contract specifically identifies-
 - i. The systems of records; and
 - ii. The design, development, or operation work that the vendor is to perform.
 - iii. **Include the Privacy Act notification contained in this contract in every solicitation and resulting subcontract and in every subcontract awarded without a solicitation, when the work statement in the proposed subcontract requires the redesign, development, or operation of a system of records on individuals that is subject to the Act; and**
- b. Include this clause, including this paragraph,
- c. **in all subcontracts awarded under this contract which requires the design, development, or operation of such a system of records.**

In the event of violations of the Act, a civil action may be brought against the agency involved when the violation concerns the design, development, or operation of a system of records on individuals to



accomplish an agency function, and criminal penalties may be imposed upon the officers or employees of the agency when the violation concerns the operation of a system of records on individuals to accomplish an agency function. For purposes of the Act, when the contract is for the operation of a system of records on individuals to accomplish an agency function, the Vendor is an employee of the agency.

"Operation of a system of records," as used in this clause, means performance of any of the activities associated with maintaining the system of records, including the collection, use, and dissemination of records. "Record," as used in this clause, means any item, collection, or grouping of information about an individual that is maintained by an agency, including, but not limited to, education, financial transactions, medical history, and criminal or employment history and that contains the person's name, or the identifying number, symbol, or other identifying particular assigned to the individual, such as a fingerprint or voiceprint or a photograph.

"System of records on individuals," as used in this clause, means a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual.

21. **Procurement of Recovered Materials** – The Vendor agrees to provide a preference for products and services that conserve natural resources that protect the environment and maximizes energy establishing an affirmative program for procurement of recovered materials identified as EPA guidelines.
22. **Equal Employment Opportunity (EEO)** – The Vendor agrees to obey all laws and regulations regarding discrimination for reasons of race, color, gender, natural origin or social condition, sexual orientation, age, political or religious belief or any other discriminatory cause in the provision of services contained in this contract. It will also have the responsibility to avoid creating a hostile environment, free of all types of harassment, to include sexual harassment. According to *Executive Order No. 11246, Amendment No. 11375, 41 CFR Part 60, Americans with Disabilities Act of 1990 (ADA) and 2 CFR Part 200*.
23. **Contractual Legal Remedies Controversies and Pertinent Laws** – This contract will be governed by the laws of the Government of Puerto Rico and the United States of America. Should any disposition, cause or part of this contract be contested for any reason before a Court of Law and declared unconstitutional or null, such determination will not affect, undermine or invalidated the remaining dispositions or clauses of this contract, rather, in its effect will limit only to the disposition declared unconstitutional or null. Both parties accept that the San Juan Superior Court (First Instance) will be the court with pertinent jurisdiction to elucidate any judicial action originating from this contract.

**Attachment K: Vendor Certification Requirement**

The following certification shall be provided to the Federal Oversight Management Board by each Proponent under contracts submitted for review:

1. The Proponent's sub vendor(s) in connection with the contract⁴ is (are) the following:
2. Neither the Proponent nor any of its owners⁵, partners, directors, officials, or employees, has agreed to share or give a percentage of the vendor's compensation under the contract to, or otherwise compensate, any third party, whether directly or indirectly, in connection with the procurement, negotiation, execution or performance of the contract, except as follows:
(Name of individual or firm, including names of principals or owners of the latter) (Principal terms and conditions of the compensation sharing arrangement)
3. To the best knowledge of the signatory (after due investigation), no person has unduly intervened in the procurement, negotiation, or execution of the contract, for its own benefit or that of a third person, in contravention of applicable law.
4. To the best knowledge of the signatory (after due investigation), no person has: (i) offered, paid, or promised to pay money to; (ii) offered, given, or promised to give anything of value to; or (iii) otherwise influenced any public official or employee with the purpose of securing any advantages, privileges or favors for the benefit of such person in connection with the contract (such as the execution of a subcontract with vendor, beneficial treatment under the contract, or the written or unwritten promise of a gift, favor, or other monetary or non-monetary benefit).
5. Neither the Proponent, nor any of its owners, partners, directors, officials, or employees or, to the best of its knowledge (after due investigation), its representatives or sub-vendors, has required, directly or indirectly, from third persons to take any action with the purpose of influencing any public official or employee in connection with the procurement, negotiation or execution of the contract.

The above certifications shall be signed by the Chief Executive Officer (or other officer with equivalent position or authority to issue such certifications) of the Proponent.

In the event that a Proponent is not able to provide any of the above certifications, such Proponent shall provide a written statement setting forth the reasons therefor.

Name of Proponent

Proponent's Authorized Representative Signature (If Corporation, Signed and Sealed)

Date

⁴ As used herein, the term "contract" is inclusive of any amendments, modifications or extensions.

⁵ For purposes of this certification, a vendor's "owner" shall mean any person or entity with more than a ten percent (10%) ownership interest in the vendor.



Attachment L: Build America, Buy America Act

FROM:

Name of Vendor:

Vendor Authorized Representative:

Mailing Address:

Contact Telephone:

_____ The Proponents certifies to the best of its knowledge and belief, it complies with the provisions specified in the Build America, Buy America Act.

_____ The Proponent certifies to the best of its knowledge and belief, it does not comply with the provisions specified in the Build America, Buy America Act.

If Vendor does not comply with the provisions specified in the Build America, Buy America Act, which may be accessed at <https://www.whitehouse.gov/wp-content/uploads/2022/04/M-22-11.pdf>, Vendor must attach an explanation including the following information:

- Estimate of the percentage of iron and steel to be used in the project are produced in the United States.
- Estimate of the percentage of manufactured products to be used in the project are produced in the United States
- Estimate of the percentage of construction materials to be used in the project are produced in the United States

Definitions of these terms may be found here: <https://www.fema.gov/grants/policy-guidance/buy-america>

Certified:

Name of Proponent

Proponent's Authorized Representative Signature (If Corporation, Signed and Sealed)

Date

**Attachment M: Sourced Critical System Components**

For critical system components to be incorporated into the scope of supply for the Equipment, the Proponent proposes to source components from the following manufacturers:

Manufacturer: Mechanical Seals	_____
Control Valves and Regulators	_____
Pressure Transmitters (Gauge and Differential)	_____
Temperature Transmitters (Sensors, transmitters & Thermowells as applicable)	_____
Flowmeters	_____
Pressure Gauges	_____
Level/Sight Glasses	_____
Instrument Fittings	_____
Variable Frequency Drives	_____



Equipment Specifications and Services
RFP 23J-09392 ACQUISITION OF PRIME POWER RECIPROCATING ENGINE
GENERATORS FOR THE PORTS AUTHORITY

INTRODUCTION

This section refers to the Equipment Specifications and Services specified in RFP 23J-09392 and dictates the scope of work and requirements for PRIME POWER RECIPROCATING ENGINE GENERATOR(S), including controls, required auxiliaries, fuel conditioning equipment and accessories ("Specification" or "Specifications").

Each engine generator package and required ancillary systems shall include features needed for safe, highly reliable, efficient, long-term operation. Design shall be in accordance with good engineering practice, applicable standards, and shall meet the strict demands typical of industrial power plants for safety and reliability, as well as those imposed by the Owner and all regulatory agencies having jurisdiction in the Commonwealth of Puerto Rico.

1. PRODUCTS

1.1 MANUFACTURER QUALIFICATIONS – ENGINE GENERATORS

- A. Only Proponents with demonstrated experience in the manufacturing, testing, and servicing of PRIME POWER RECIPROCATING ENGINE GENERATORS will be considered. If the Proponent is a packager or independent representative, a letter shall be provided from the engine generator original equipment manufacturer authorizing the Proponent to sell and service the proposed engine generator package. Services to be provided with the base proposal shall be limited to that which is necessary to fulfill the installation and warranty requirements as defined herein.

1.2 MANUFACTURER QUALIFICATIONS – MISCELLANEOUS EQUIPMENT

- A. Critical system components that may be incorporated into the scope of work should only be sourced from manufacturers with at least five years of experience and a documented record of quality product performance. Critical system components include:
1. Mechanical Seals
 2. Control Valves and Regulators
 3. Pressure Transmitters (Gage and Differential)
 4. Temperature Transmitters (Sensors, transmitters & thermowells as applicable)
 5. Flowmeters
 6. Pressure Gauges

7. Level/Sight Glasses
 8. Instrument Fittings
 9. Variable Frequency Drives
- B. Provide instruments and control valve actuators with “HART” protocol, where available. Connect HART communication signals as a homerun, not in a multidrop configuration. HART hand-held interface connections shall be fixed to the terminal block on smart transmitters and actuators. HART communications shall include the following device parameters:
1. Digital process variable (primary and secondary)
 2. Status and Diagnostic information
 3. Device identification
 4. Calibration of instruments

1.3 SCOPE OF SUPPLY – ENGINE GENERATOR PACKAGES

Components and systems within the Vendor’s engine generator package scope shall be complete, including control valves, piping, equipment, instrumentation, controls, alarms, wiring, insulation, cladding and other items required for a complete, functional, highly reliable and highly-automated installation in accordance with good engineering practices and the rigorous demands of industrial power plant service. To the extent practical, equipment shall be delivered in modular form; pre-piped, pre-wired, pre-terminated and pre-tested.

- A. Furnished by Vendor (Engine Generator Package Scope)
1. Freight, FOB Job Site (or FOB Destination).
 2. Electric generator.
 3. Computer-based engine generator control system as defined herein.
 4. Steel base frame with full size, continuous drip pan.
 5. Base plates, shims, alignment/leveling hardware, and any other special foundation imbeds required to set and align equipment. Vendor shall provide vibration isolation components as required for sustained operation as defined herein.
 6. Compressed Air/Electric starting system or approved alternative.
 7. Lube oil systems, pumps and coolers for engine and generator.
 8. Fuel system capable of burning syngas specified herein.
 9. Interconnecting piping, tubing, and/or flexible hose connections as required between vendor-furnished auxiliary skids and main package. Where equipment location, such as the roof mounted coolers, is by others, the Vendor shall specify materials of construction and identify design requirements.
 10. Inlet air filter housing and filter media.
 11. One set of clean new combustion air filters for startup and commissioning of the engine generators, and a complete second set of clean new filters upon turnover of the units to Owner.
 12. Sound attenuators for combustion air and exhaust systems, as required to meet overall noise limits specified herein.
 13. Insulation and cladding for heat retention, noise reduction and personnel protection (140 degrees F maximum surface temperature, or as required by applicable codes and standards).

14. Instruments and equipment required for interface with distribution switchgear such as current transformers and neutral ground resistor.
15. Safety rails as required in accordance with OSHA standards.
16. Borescope inspection ports.
17. Vibration monitoring, condition monitoring, and data management systems.
18. Real-time event recorder with first-out identification and reporting to the operator.
19. Engine performance monitoring system.
20. Painting per Vendor's standard.
21. Safety guards on exposed rotating parts, in accordance with OSHA standards.
22. Required lifting/moving equipment and tools to remove and replace engine, generator (if required), and gear equipment (if required) within 24 hours.
23. Single points of connection for AC and DC emergency power distribution system internal to package for controls, emergency lights and pre/post lube oil pumps (if applicable) for a coast down and cool down period sufficient to prevent equipment damage after a full load trip.
24. On-site support during offloading, setting, startup, commissioning, and performance testing.
25. Operations and maintenance personnel training at the job site, including travel and local living expenses as specified herein.
26. Catalyst for reduction of carbon monoxide and UHCs, catalyst housing, and ducting transitions.

B. Furnished by Others

1. Offloading, storage, erection and installation of the equipment at the job site.
2. Foundations, anchor bolts and grouting.
3. Piping, valves, fittings and supports outside the Vendor's scope of supply.
4. Instrument and service air supply to the unit
5. Duct transitions external to unit between building exterior walls/roof and engine generator package for combustion air connections (note: engine generator vendor shall furnish design criteria for said ductwork – materials of construction, pressure drop limitations, coating & insulation requirements, etc.).
6. DC power for DC emergency power distribution system (to be provided by the Plant DC system).
7. AC Power Supply from station service to package AC power/lighting system.
8. Conducting on-site equipment performance test (Vendor shall provide oversight and support as specified herein).
9. Wiring of Vendor-furnished controls to Plant Control System (PCS).
10. Classroom facilities for on-site training.
11. Required lifting/moving equipment and tools to remove and replace engine, generator.
12. Building permits and environmental permits.

1.4 PERFORMANCE GUARANTEES

The following performance values shall be provided at guarantee base conditions as well as the other conditions indicated in Exhibit A and shall be verified during the on-site Performance Test.

A. Capacity and Fuel Consumption

1. “Guaranteed Power” which is defined as the 100 percent power output of the engine generator, as measured at the generator breaker, expressed in kilowatts, net of package-driven pumps, exciters and other auxiliaries, based on site specific factors, at guarantee ambient conditions and specified fuels.
2. “Guaranteed Fuel Consumption”, which is defined as the fuel consumption of the engine generator expressed in BTU/hr, lower heating value basis, at the 100 percent guaranteed power output level and guarantee ambient conditions, based on site specific factors and specified fuel.
3. Part-load performance data shall also be provided for the load conditions indicated in Exhibit A.
4. Performance shall be based on inlet air pressure drop including filters, silencers, and ductwork. Curves to allow correction of engine generator performance for varying inlet pressure drop shall be provided for a range of 0” to 8” water gauge.
5. Performance shall be based on exhaust pressure drops including a stack with height equal to 75 ft above the base of the engine package, vendor supplied silencer, and vendor supplied exhaust catalyst ductwork pressure drops. For bidding purposes, assume stack pressure drop to be 1 in. of water. Curves to allow correction of engine generator Performance for varying back pressure shall be provided for a range of 3” – 10” of water gauge.

B. Engine Generator Emissions

1. “Guaranteed Exhaust Emissions” from 50-100 percent guaranteed power output for the following pollutants shall be indicated with Vendor’s proposal for emissions both upstream and downstream of the catalyst, expressed in 1) g/hp-hr at 15 percent oxygen, and 2) total pounds per hour, for the specified fuel (taken at engine exhaust):
 - a. NO_x
 - b. CO
 - c. VOC
2. Each generating unit shall not exceed the following emission limits at maximum capacity as listed below. Additional points may be awarded during the selection process for achieving lower emission rates (during a performance test).
 - a. NO_x = 1 g/hp-hr (82 ppm @ 15% O₂)
 - b. CO = 2 g/hp-hr (270 ppm @ 15% O₂)
 - c. VOC = 0.7 g/hp-hr (60 ppm @ 15% O₂)
3. The stationary SI internal combustion engine shall be certified to meet the emission standards and information as required in 40 CFR Parts 1048, 1054, and 1060, as applicable.
4. The manufacturer’s recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions shall be less than or equal to 1.1.
5. Part-load performance data shall also be provided for the load conditions in Exhibit A.

C. Noise Limitations

1. Noise levels for equipment furnished under this scope of work shall be guaranteed not to exceed 85 dBA (maximum) at 3 feet distance and 5 feet above grade under free field conditions over a reflecting plane measured at points spaced six feet apart

around the equipment. Where engine generator noise may not be mitigated without an enclosure, Vendor shall provide noise profiles of the equipment for evaluation by others. Specified noise limits should be applied to the engine exhaust outlet and noise transmitted through the silencer/stack.

2. The specified noise limits shall apply to all normal modes of operation.

D. Seismic & Wind Requirements

1. Seismic & Wind Performance: Engine generator, associated auxiliary equipment, accessories, and components shall withstand the effects of earthquake and wind motions determined according to the seismic load information provided in Attachment E of the RFP 23J-09392.

E. B11 Compliance

1. Comply with B11.19 - Performance Requirements for Risk Reduction Measures: Safeguarding And Other Means Of Reducing Risk.

F. NFPA Compliance

1. Comply with NFPA 37.
2. Comply with NFPA 70.

1.5 DESIGN REQUIREMENTS

The intent of this Specification is to utilize Vendor's standard package design where possible. However, the specific design features discussed herein shall be included as a minimum.

A. Engine Generator Package

1. Engine generator shall be designed for continuous operation including load-following operation between 50 percent and 100 percent load.
2. Combustion emissions control shall be via Lean Burn NOx technology for NOx control and shall utilize an oxidation catalyst for Carbon monoxide and VOC/UHC.
3. Engine performance mapping system shall allow continuous, real-time thermodynamic modeling of engine generator for purposes of optimizing performance. Parameters to be monitored include:
 - a. Inlet Dry Bulb and Wet Bulb Temperatures
 - b. Turbo Inlet Air Pressure, downstream of the filters
 - c. Exhaust Temperature
 - d. Fuel Flow & Pressure
 - e. Combustion Air Inlet Flow
 - f. Exhaust Back Pressure
4. Inlet Air Filters
 - a. Heavy-duty air cleaner with replaceable dry-filter element and "blocked filter" indicator.
5. Remote Cooling System

- a. Closed loop, liquid cooled, with remote radiator and auxiliary coolant pump, heat exchanger, expansion tank and code required appurtenances.
- b. Size of Radiator: Adequate to cool the engine all engine, generator and auxiliary system loads within the scope of the engine generator supplier for all load conditions defined herein.
- c. Expansion Tank(s): Constructed of welded steel plate and rated to withstand maximum closed-loop coolant system pressure for engine used. Equipped with gage glass and petcock. Expansion tank sized to contain expansion of total system coolant from cold start to 110 percent load condition
- d. Fan: Driven by electric motor in compliance with the motor specifications defined herein.
- e. Coolant: Solution of ethylene-glycol-based antifreeze and water, with anticorrosion additives as recommended by engine manufacturer. Solution concentration to be determined by Vendor based on site conditions and specified piping and cooler materials of construction.
- f. Temperature Control: Self-contained, thermostatic-control valve modulates coolant flow automatically to maintain optimum constant coolant temperature as recommended by engine manufacturer.

6. Muffler/Silencer

- a. Silencer to be sized by engine manufacturer coordinated with the general system layout provided in Exhibit B to not exceed engine manufacturer's engine backpressure requirements.
 - 1) Sound level measured at a distance of 3 feet from exhaust discharge after installation is complete shall be 85 dBA or less.

7. Lube Oil System

- a. A Lubricating oil system shall be provided for the engine generators. Design of the lube oil system shall be per manufacturer's standard, but shall include the following features as a minimum:
 - 1) Main oil pump(s).
 - 2) Pumps, filters and strainers shall be fail safe (i.e. pre-installed backups, ready for automatic or manual switchover or gravity fed rundown tanks).
 - 3) A closed loop lube oil cooling system including heat exchanger and a roof-mounted air-cooled radiator. Heat exchangers shall include provisions for cleaning cooling water side
 - 4) Integral lube oil tank.
 - 5) Electric lube oil tank heater (as required).
 - 6) Duplex lube oil filters with transfer valve and ability to shift to the standby filter during normal operation.
 - 7) Demister system suitable for maintaining vent area free from oil collection.
 - 8) Drip pan.
 - 9) Filter and Strainer: Rated to remove 90 percent of particles 5 micrometers and smaller while passing full flow.

- 10) Thermostatic Control Valve: Control flow in system to maintain optimum oil temperature.
 - b. Vendor shall furnish lubrication oil, in required types and quantities, sufficient for:
 - 1) Completion of initial lube oil flushing.
 - 2) Additional required for initial operation.
 - c. Engine shall be equipped with external fresh and used oil connections including isolation valves and flanged connections to be provided by Vendor.
 - d. Vendor shall furnish necessary materials, containment, controls, and safety procedures (step-by-step) to address specific toxicity characteristics for any synthetic lubricants that are utilized in their systems.
8. Safety ladders, handrails, gratings, steps shall be provided for accessing components of the Vendor's package that require normal maintenance. All structural or support members shall be hot dipped galvanized.

B. Fuel System

1. A fuel system capable of operating on specified syngas fuel as detailed in Exhibit D shall be provided. The fuel system shall include all necessary components (control valves, instrumentation, etc.) to control and monitor fuel flow and pressure to the engine generator package. The unit control system shall automatically control and modulate fuel flow during start-up, shut down, and normal operation. All instrumentation and valves must be accessible and maintainable for maintenance and operation activities.
2. Fuel System shall include the following components, as a minimum:
 - a. Fuel-Shutoff Solenoid Valves: NRTL-listed, normally closed, safety shutoff valves.
 - b. Fuel Filters
 - c. Manual Fuel Shutoff Valves.
 - d. Flexible Fuel Connectors

C. Electric Generator

1. The electric generator shall be provided as an integral part of the engine generator set. Vendor is responsible for the delivery, performance, control, and technical field support of the generator.
2. Generator shall be 13,800 volts, 3 Phase, 0.80 power factor, 60 Hz, Totally Enclosed Water-to-Air Cooled (TEWAC), with Vendor-selected capacity based on machine output.
3. The generator shall be capable of operating in standalone, paralleling, synchronous, isochronous and droop mode.
4. The generator shall be rated for continuous (100 percent duty) operation, class F insulation, B-rated temperature rise, and meet the following requirements:
 - a. TEWAC enclosure rated for outdoor installation
 - b. Automatic voltage regulation, +/- 0.5 percent

- c. Voltage adjustment of +/- 5 percent of rated voltage
 - d. Load regulation of +/-1 percent
 - e. Full load efficiency of 97 percent or better
 - f. Core losses not to exceed 100 KW
 - g. Sub transient reactance of 0.25 or less
 - h. Short circuit ratio of 0.43 +/- 5 percent
 - i. Six RTDs in stator winding for monitoring and protection by the Engine Control Panel. RTDs shall be redundant element type at each location or have redundant RTDs at each location.
 - j. Bearing RTDs for monitoring and protection by Engine Control Panel.
 - k. The generator shall be provided with a 2/3 winding pitch.
5. The unit grounding system will be a high resistance system.
- a. System components shall limit line-to-ground fault to 200 amperes at 8000 Volts line-to-ground.
 - b. Provide non-corrosive steel grounding pads located at two opposite mounting legs.
6. Furnish a metal cubicle enclosing the generator neutral side terminals, with C400 current transformers with a minimum meter accuracy class of 0.3 at a burden of B-0.9 and a thermal overload rating of 1.5. Phase CT ratios shall be selected based on the generator maximum output current with a minimum rating of 1200:5. Wire the current transformer secondary connections to shorting type terminal blocks in an isolated terminal box on the rotating equipment baseplate. All CT leads shall be brought out to the shorting terminal block. Refer to Exhibit A for the required number of CT's.
7. Owner will supply wye ground-wye ground potential signals to the unit control panel for synchronization and control. Bus PT's and generator line PT's shall be supplied with the switchgear.
8. Furnish a metal cubicle enclosing the generator lineside terminals, lightning arresters and surge capacitors. The cubicle shall have adequate provisions for cable terminations to be furnished and installed by the Owner.
9. Both line and neutral terminations will be cable in conduit. The load side termination cabinet should be adequately sized to accommodate Class 1 terminations (3 x 750 KCMIL conductors per phase minimum).

D. Generator Control and Protection

- 1. Terminate current transformer leads at shorting type terminal blocks.
- 2. Provide FT-1 type test blocks for current and voltage inputs to the generator protective devices.
- 3. Wiring connections for current transformers within panels shall be #12 AWG red SIS type conductors and terminations shall utilize uninsulated ring tongue lugs.
- 4. Control power terminations should be terminated at pullout type fuse blocks.

E. Miscellaneous Electrical Equipment

1. Motors rated $\frac{3}{4}$ hp or greater shall be rated 460V, 3-phase, with TEFC enclosure and be non-overloading at the rated condition without using any portion of the service factor.
2. Provide all three phase motors with at least 1.15 service factor at 40 degrees C, continuous duty. Motor hp selection shall be based on a 1.0 service factor.
3. Motors rated $\frac{1}{2}$ hp or less shall be rated 115V, 1-phase, with TEFC enclosure and be non-overloading at the rated condition without using any portion of the service factor.
4. Select motors for low starting current, designed for continuous duty to provide the running torque and pull in torque required to send the load. Maximum kVA starting code letter shall be Code G.
5. Motors shall meet or exceed NEMA Premium™ efficiency ratings.
6. Motors shall have copper windings and Class F or higher insulation but rated based on Class B temperature rise.
7. Motors controlled via variable frequency drives (VFD) shall be inverter duty rated with an insulation system that meets NEMA MG1 Part 31 and are suitable for operation with pulse width modulated variable speed drives.
8. Space heaters: Maintain windings a minimum of 5 to 10 degrees C above dew point during de-energized conditions. Space heaters shall be rated 240V AC and operated at 120V AC.
9. Motors shall be equipped with grease-lubricated, anti-friction ball or roller bearings with InproSeal bearing isolators on fan and drive end shaft extensions for IP56 protection. Bearings shall have an AFBMA L10 life of 100,000 hours or more. All bearings shall be constructed so as to prevent lubricant leakage into the motor under normal or excess lubrication. Permanently-lubricated bearings will not be acceptable. All ball or roller bearings shall be equipped with Alemite or Zerk grease and relief fittings. Grease points shall be readily accessible during normal equipment operation. Lubrication instructions shall be furnished with each motor.
10. Motor frame and end brackets shall be cast iron with non-sparking exterior fan and cast-iron guard. Lifting eyes shall be provided. Include brass drain and breather to ensure drainage from lowest point of motor.
11. Motors shall have cast iron conduit terminal boxes of adequate size to support proper termination of supply conductors selected in accordance with the NEC. Minimum size shall be two sizes larger than required by the National Electrical Code (NFPA 70), latest edition.
12. Direction of rotation shall be permanently marked on motor where motor is suitable for only one direction of rotation.
13. Motors shall have steel sole plates. Maximum allowable no load vibration shall be 0.10 inches per second. Vibration measurement points, capable of routine vibration data collection, shall be identified for all three axes of vibration. If permanent mounted vibration equipment is installed, local vibration monitoring points shall be provided.
14. Select motors for quiet operation. Motor sound power level when measured at a no-load condition shall not exceed 85 dBA when determined in accordance with IEEE Standard 85, latest edition.
15. Equipment (including motors) located within hazardous locations to meet or exceed requirements of NFPA 70 for the class and group of hazards in which the equipment is located.

F. Engine Generator Control System

1. General: The engine generator package shall be equipped with Vendor's standard computer-based control system including meters, gauges, alarms and controls, locally mounted in modular enclosure, suitable for interface with Owner's PCS and Owners Grid Control System (GCS) via hardwired and network connections. The GCS will dispatch the engine generator and the PCS will contain the historian/graphics packages. While the engine generator control system must include all functions required to operate and maintain the engine generator, it must also support integration with the PCS and GCS while minimizing the engineering and support effort to perform the initial integration as well as ongoing maintenance and modifications. Reference Exhibit C for the conceptual network architecture. The engine generator control system and its interface to the PCS/GCS should follow the guidelines below:
 - a. Cyber Security: In response to the heightened state of threat awareness surrounding critical infrastructure, given the significant rise of cyber-attacks threatening utilities across the country, Owner seeks to formalize its approach to securing supervisory control systems utilizing reputable standards and frameworks from the National Institute of Standards and Technology (NIST). The NIST Risk Management Framework (RMF), as defined by the Special Publication 800-37 Standard, provides holistic means to quantify the response to risk from a cyber security perspective, and align countermeasures required to effectively reduce, transfer, or remove risk to key systems and critical assets across the industrial control system network (ICS). This extends to associated plant subsystems including the engine generator control system design to support the overall plant cyber security protection;
 - 1) Control systems shall follow guidelines from NIST 800-82 Rev 2 Controls which defines requirements for control equipment including operator terminals, PLC's and network components.
 - 2) Alternatively, a cybersecurity design that follows IEC 62443 in lieu of NIST is acceptable.
 - 3) Remote access to the engine generator controls shall subject to approval of Owner's cybersecurity team. Connectivity for remote monitoring shall be included with the control system, but it will be evaluated for compliance with cyber security requirements.
 - 4) Software patches or upgrades shall be vetted by an offline computer prior to upload to the engine generator control system.
 - b. Interlocks: All safety and equipment protection interlocks are to be interfaced between the engine generator and GCS via individual hardwired I/O signals. All permissive/interlocks between systems shall be implemented with fail-safe design practices such that loss of circuit continuity will remove the permissive and result in the appropriate protective action.
 - c. Load Control: Load control to the engine generator shall be via 4-20 mA isolated inputs to the GCS.
 - d. Optimization: Various optimization control strategies may require interface between two or more vendor control systems (engine generator, Inlet Air, etc). Non-critical interfaces which support these control strategies shall be implemented utilizing data communication interface. Loss of connection of this interface shall not result in shutdown of the unit but may limit the operating mode of the unit.

- e. Visualization: The engine generator control system shall include a data link that sends all signals necessary to remotely view/operate the engine generator control system from the PCS.
 - f. Alarms: The engine generator control system shall support monitoring of alarm conditions within the engine generator controller(s) by the PCS HMI. Access to engine generator control processors shall not negatively impact the throughput or latency of the engine generator controller communications with its I/O, the engine generator HMI(s) or the PCS controller(s). The vendor shall include a database listing of all engine generator alarm conditions including: Tag/Address, Description, Alarm State.
 - g. Historian: The engine generator control system shall support collection of data by the PCS historian. Access to engine generator control processors shall not negatively impact the throughput or latency of the engine generator controller communications with its I/O, the engine generator HMI(s) or the PCS controller(s).
- 2. The engine generator control system shall incorporate an individual panel mount display per engine generator (AB PanelView or equivalent) and a one common desk style computer for locating in the central control room as shown on the conceptual network diagram in Exhibit C.
 - 3. Standard engine generator control screens shall include all normal operator functions, including setpoints, alarms, startup and shutdown control. Engineering interaction with the engine generator control system shall be accomplished through manufacturer's standard interface. GCS interface to the engine generator control system will include standard start-up / shutdown, summary alarm acknowledge, auto-synch permissive, MW / MVAR setpoints, raise / lower commands for speed / voltage, etc. First-out indication shall be included as part of the information provided on the control interface system.
 - 4. Communications link shall be provided via Modbus TCP/IP (Cat 6) to the PCS to allow monitoring and control of equipment at either local control panels/stations or from the primary control room located in the main plant building.
 - 5. The engine generator control system provided in the unit control panel for each of the engine generators shall include the following features as a minimum:
 - a. The controls system must support control of engine fuel and spark timing through an electronic engine control module to provide isochronous or droop speed control and enhanced performance from variable spark ignition timing and duration. The control module shall provide idle and rated speed settings; adjustable monitoring of vital engine parameters; timing control for load and fuel quality; integrated temperature sensing for cylinder exhaust port, turbocharger inlet/outlet, average for left and right cylinder banks; and adjustable air/fuel ratio control to account for humidity and atmospheric pressure. The control shall include oxygen sensor and detonation sensor.
 - b. The digital synchronizer and load share control unit internal to the generator control panel of each engine generator must support performing speed and phase matching, synchronizing, paralleling, load sensing, load control, and speed control for the associated generator. The control panel shall provide safe dead bus closure, true RMS power sensing, bumpless transfer, programmable breaker retry, adjustable ramps for loading and unloading, digital power factor control, process import/export control, digital tuning of alternator voltage output, and shall be easily programmable using a hand held programmer.

- c. Complete control of engine generator Package, including normal start, automatic synchronization, normal stop, emergency stop, base load, load following and manual load changes. The Control System shall display parameters such as generator voltage, current, power, reactive power, frequency and kWh and status of all key auxiliary devices.
 - d. Non-resettable hour meter.
 - e. Automatic, load-following operation between 25 percent and 100 percent of engine generator output.
 - f. Complete vibration and bearing temperature monitoring.
 - g. Complete engine performance mapping system, including transducers, wiring, software, monitor and hardware. System shall allow real-time computation of engine generator heat rate, plus trending of compressor efficiency, and other key performance parameters.
 - h. Automatic synchronizing and closing of the generator circuit breaker control will be provided. Governor and Exciter shall accept raise/lower pulses from remote signals from Owner's GCS and manual controls.
 - 1) Synchroscope shall be provided in software.
 - i. KW load control input from load controller as a 4-20 mA signal.
 - j. KVAR/power factor control input from load controller as a 4-20 mA signal.
 - k. Electronic Voltage Regulator with Automatic/Manual Control.
 - l. Generator Metering
 - m. Integral data Historian capable of archiving and trending real time data from the engine generator for a minimum of 45 days. System shall include complete graphing trending ability. A listing of the data available to be archived shall be provided. Historical data shall also be made available to the PCS via a network connection, separate from the local HMI network, to support a pair of Owner-furnished redundant data servers.
 - n. In the event of a plant upset or trip, the Control System shall record the sequence in which the alarm signals were received ("first-out" capability), for later analysis and troubleshooting by plant personnel. Time stamps shall be 1msec accuracy minimum.
 - o. The plant will utilize a GPS based clock system. Engine generator controls and protective devices (as applicable) shall be provided with an IRIG-B clock signal input or a network PTP signal.
6. The engine generator unit control panel shall be designed to permit load control and monitoring by Owner's GCS The unit control panel shall accept the following commands from voltage-free relay contacts (or analog as noted) in the GCS:
- a. Engine Start/stop
 - b. Raise/Lower Voltage
 - c. Raise/Lower Power Output (4-20 mA from load controller in Auto; dry contacts in manual)
 - d. Raise/Lower VAR's (or Power Factor) (4-20 mA from load controller in Auto; dry contacts in Manual)
 - e. Emergency Shutdown
 - f. Droop/Isochronous
7. The unit control panel shall provide, as a minimum, a Modbus TCP communication link to the PCS via CAT 6 link via access switches which conveys the following functions:

- a. Unit Status (shutdown, starting, on-line, etc.)
 - b. Sensor Values (speeds, temperatures, pressures, vibration, flow, level, etc.)
 - c. Electrical Values (amps, volts, watts, frequency, VAR's, Power Factor)
 - d. Generator Circuit Breaker Status (closed/tripped)
 - e. Alarms and associated set points.
 - f. Shutdowns
 - g. Sensor Failures
 - h. Status of Auxiliaries
8. The unit control panel shall display on its HMI screens, as a minimum, the following parameters (signal source provided in parenthesis):
- a. Exciter Amps (Exciter Comm. Link)
 - b. Exciter Volts (Exciter Comm. Link)
 - c. Generator MW Output (Engine Control Panel)
 - d. Generator Amps (Engine Control Panel)
 - e. Power Factor (Engine Control Panel)
 - f. Generator and Bus Frequency (Engine Control Panel, 4-20 mA Signal from Owner's Switchgear)
 - g. Generator Voltage (Engine Control Panel)
 - h. Bus Voltage (4-20 mA Signal from Owner's Switchgear)
9. The engine generator control system HMI's (Panel mount per engine generator and one common for control room) shall support a multi-level user security system (least privileges basis) per the following user group permissions guidelines:
- a. Guest: View only access. Navigation to all process status windows.
 - b. Operator: Permissions to operate equipment, enter process set points, and acknowledge/reset alarms.
 - c. Maintenance: Permissions to tune control loops, calibrate instruments, modify process alarms, and modify process constraint parameters.
 - d. Engineer: Access to all process and machine parameters.
 - e. Admin: Edit control system, assign user access levels and security configuration.
10. Furnish also a separate overspeed shutdown device which shall, in case of predetermined overspeed condition, instantly stop the associated engine generator.

G. Tagging and Marking

- 1. Each major piece of equipment shall have a standard nameplate securely affixed showing the tag number; the name and address of the manufacturer; serial and model number; and such other information as the Vendor may consider necessary to complete the identification of the item.
- 2. Instrument and control valve tag numbering shall be based on ISA format (Unit + System + Function + Number + Train). Owner's engineer will define unit numbers for the equipment.
- 3. Provide nameplates for each instrument, transformer, light, meter, switch, control, terminal strip, panel mounted component (including fuses), fuse blocks, timers, relays, auxiliary relays, etc., in accordance with a nameplate schedule. Color coding shall be used for equipment and functional identification.

4. Nameplates shall be corrosion resistant metal for items exposed to process or other severe conditions or laminated two-ply plastic (white face to black core) with legend engraved to black core for items such as electrical and control panels which are not exposed to process conditions.
5. Characters shall be uniform block style not smaller than ½ inch (13mm) for switchgear sections, switching devices, and panelboards, and not smaller than ¼ inch (6mm) for instrument transformers, relays, alarms, instruments, and control devices.
6. Nameplates and tags shall be provided for all valves, steam traps and other equipment. Label all piping.
7. All items listed on the Bill of Materials shall be identified by assigned tag numbers and fully described by manufacturer, type and model numbers as applicable.
8. All engine generator parts, components, assemblies and items shall be clearly and permanently match-marked for field assembly and installation. The match-marks shall be marked by letters or numbers and shall be cross referenced to the shipping paper work and erection drawings and instructions.
9. Corrosion resistant metal nameplates shall be attached at easily accessible locations for all equipment and components. The name plates shall be stamped with the information required by the applicable Code and shall also include the Vendor's name, Vendor's serial number, and equipment tag number.

1.6 VIBRATION ISOLATION DEVICES

- A. Restrained Spring Isolators: Freestanding, steel, open-spring isolators with seismic restraint.
 1. Housing: Steel with resilient vertical-limit stops to prevent spring extension due to wind loads or if weight is removed; factory-drilled baseplate bonded to 1/4-inch thick, elastomeric isolator pad attached to baseplate underside; and adjustable equipment mounting and leveling bolt that acts as blocking during installation.
 2. Outside Spring Diameter: Not less than 80 percent of compressed height of the spring at rated load.
 3. Minimum Additional Travel: 50 percent of required deflection at rated load.
 4. Lateral Stiffness: More than 80 percent of rated vertical stiffness.
 5. Overload Capacity: Support 200 percent of rated load, fully compressed, without deformation or failure.
 6. Minimum Deflection: 1 inch.
- B. Vibration isolation devices shall not be used to accommodate misalignments or to make bends.

2. EXECUTION

1.1 FACTORY TESTS AND INSPECTIONS

- A. Vendor shall provide factory testing of engine generator package(s) and all auxiliaries including certified test reports and witnessing of certain tests by Owner's representatives, as tabulated next page. Column headings are defined as:

1. “Witnessed Test” is a test conducted in manufacturer’s factory, witnessed by Engineer or Owner’s representative who shall neither participate, nor interfere with test. A certified test report will be provided by manufacturer. Travel costs associated with Engineer or Owner’s representative attending the witnessed test will be Owner’s responsibility. Vendor’s proposal shall include details of all “Witness Tests”, including location and duration of test.
2. “Certified non-Witnessed Test” is a test conducted in manufacturer’s factory without Owner representative, but with a certified test report provided by manufacturer.

DESCRIPTION	WITNESSED TEST	CERTIFIED NON WITNESSED TEST
Full load string test of power output and fuel consumption	X	
Engine, gearbox and generator vibration/mechanical	X	
Functional test of complete engine-generator and controls package, including demonstration of PCS interface	X	
Generator test, IEEE 115		X
Auxiliary packaged equipment skids		X

- B. Provide step-by-step test procedures including conditions required for testing, method of correcting performance to guarantee conditions, instrumentation required, calibration procedures, and acceptance criteria for Owner approval. All procedures shall be accepted by all parties prior to start of tests. Procedures shall be in accordance with ASME PTC 17 – Reciprocating Internal Combustion Engines Performance Test Code.
- C. Vendor shall provide factory calibration records for all Vendor-furnished instruments prior to final acceptance tests as noted below:
 1. Calibration (5 points, up and down scale for analog transmitters; for switches verify action 2 times for increasing and decreasing inputs) of all instrumentation required for both linearity and accuracy in accordance with standard industry practices or manufacturer’s recommendations.
 2. Test equipment accuracy shall be calibrated in accordance with the NIST, National Institute of Standards and Technology.
 3. Field mounted instruments shall be bench calibrated and panel mounted instruments shall be calibrated in the panel.
 4. Calibration and installation records shall be documented digitally and submitted with the final records with the following information provided:
 - a. Equipment tag number
 - b. Data component received
 - c. Purchase order number and/or contract number
 - d. Serial number
 - e. Calibration data
 - f. Date of calibration
 - g. Person responsible for calibration
 - h. Date component installed

1.2 PREPARATION FOR SHIPMENT

- A. Vendor shall submit step-by-step procedures for the cleaning, preservation, packaging, handling, lifting, shipping, and storage of the material and equipment provided under this order.
- B. If extended layup of equipment is required due to the Vendor's production schedule, Vendor shall provide a detailed procedure for preservation, along with a list of utility requirements.
- C. Equipment and piping must be cleaned of all foreign material, dirt, scale, grease, oil, and chemical residues, etc., in accordance with the approved cleaning methods. Items will be inspected for compliance with approved cleaning step-by-step procedures. Items which are not immediately packaged or shipped must be protected from contamination until preservation or packing is complete.
- D. Vendor shall provide all special tools for unloading, installation and maintenance of Vendor-furnished equipment. Special tools and handling equipment shall be packed separately and identified as included in the shipment. Spare gaskets shall not be bolted in place but shall be packed separately and identified. Loose clips and similar small structural items shall be packed separately, marked, tagged, and attached to larger pieces.
- E. All exposed machinery surfaces (threads, flange faces, gasket sealing surfaces, etc.) shall be coated with an easily removable protective coating. All weld bevels of carbon or ferritic alloy steel piping or equipment components that are to be welded by others shall be coated on the inside and outside surfaces for a distance of three inches from the end of the component.
- F. All flange openings shall be protected and made waterproof with bolted full size metal covers and gaskets. Flanges shall be furnished with one bolt for every other hole (minimum of four bolts). Threaded openings shall be plugged with threaded plugs of the same material as the connected part and sealed with PTFE tape thread sealant. Beveled and plain edge openings shall be suitably closed with solid metal wedge type connectors. Where required, based on the Vendor's production schedule, piping shall be filled with inert gas to prevent corrosion.
- G. Piping shall not be designated as attachment points for lifting equipment.
- H. All tagged items need to be identified with permanent stenciled metal tags or a material not subject to deterioration from outdoor storage.

1.3 INSTALLATION SUPERVISION

- A. Proponents shall furnish a list of site assistance hours needed for each of the required milestones. Proponents shall include the site assistance hours as a line by line detailed list for each task.
- B. Provide full time (10 hrs/day) field erection supervision for the duration of the tasks listed below by manufacturer's personnel. This erection shall include but not limited to:
 - 1. Installation of Engine, Generator and other items shipped loose.
 - 2. Alignment of generator and engine.
 - 3. Installation of air filter module and inlet transition ducting.
 - 4. Installation of engine/generator foundations and anchors.
 - 5. Installation of lube oil and other auxiliary skids.
 - 6. Installation of wiring and interconnects.
 - 7. Cleaning, connecting, and sealing all parts of the engine generator package.
 - 8. Electrical control and utility mechanical and fire system functional check-outs.

9. Installation of engine generator exhaust expansion joint and exhaust system ductwork.
 10. Receiving, unloading and moving all major components into place on foundations.
 11. Any items that affect the warranty of the unit.
- C. Balancing of rotating equipment shall be accomplished prior to shipment. Field balancing shall only be performed with the written approval of the Owner and the Engineer.

1.4 COMMISSIONING AND STARTUP SUPERVISION

Vendor shall provide qualified field representative(s) in required disciplines to supervise the commissioning checks and initial startup of the engine generator package, including setting up and demonstration of controls, monitoring systems, performance/trending systems and auxiliaries in Vendor's supply, and interfaces with Owner's PCS. Proponents shall furnish a list of site assistance hours needed for each Commissioning and Startup activity.

1.5 FIELD TESTS AND ENGINEERING SUPPORT

- A. The following Acceptance and Performance tests shall be performed in the field upon completion of the installation:
1. Functional test(s) for purposes of demonstrating that the equipment and systems function as designed, operate safely, reliably, and as part of an integrated plant system in accordance with good engineering practice. These tests shall include normal operations, such as startup, shutdown and load changes, as well as emergency operations, such as generator trip/overspeed and emergency coast down. Fully automatic start sequences shall be made repetitively (3 minimum) without manual control override, or failed start attempt.
 2. Functional test shall also include one hour of operation each at 25 percent, 50 percent, 75 percent, and four hours at 100 percent load.
 3. Performance test to demonstrate ability to maintain Guaranteed power and guaranteed fuel consumption. Guaranteed power and Guaranteed fuel consumption tests shall be conducted simultaneously.
 4. Reliability test to demonstrate ability to continuously run for five days without alarm or trip events. No alarm or trip devices may be bypassed during this test without Owner's approval. The performance assessment may be conducted during the reliability test.
 5. Performance tests shall be in accordance with the ASME Performance Test Code PTC17.
 6. Tests shall be performed with permanently installed plant instrumentation unless such instrumentation is non-existent. Where special temporary instrumentation is required, Vendor shall furnish said instrumentation which shall be calibrated within one week before the tests, and the calibration sheets shall become part of the test documentation. No safety device (alarm or trip) shall be bypassed during or following the reliability tests.
- B. At least 60 days prior to scheduled acceptance testing, the Vendor shall submit, for Owner's and Engineer's review, a complete acceptance test step-by-step procedure that defines

details such as protocol, type of tests, measurements to be taken, sample calculations and correction formulas, and responsible parties.

- C. Provide all step-by-step procedures and supervision required for the acceptance tests. During testing, the plant shall be operated and maintained by Owner's operating personnel, the Owner's consultant or a third-party vendor.
- D. An emissions test will be performed by Owner's consultant with Vendor's assistance. The emissions test will be designed to demonstrate and document satisfactory levels of air emissions in accordance with Vendor's guarantee and air permit limits at engine exhaust, before downstream emissions control equipment. Demonstrate and document satisfactory levels of air emissions in accordance with Vendor's guarantee and air permit limits at engine exhaust, before and after stack emissions control equipment.
- E. Vendor shall provide engineering support of and coordination with the Owner and Owner's engineers for all tests.

1.6 TRAINING

- A. Vendor shall provide training, at the Owner's facility, for the personnel listed herein so that the Owner can operate, maintain, change system configuration, and repair the complete system.
- B. Training for operators shall be conducted to accommodate a multiple shift schedule.
- C. Separate training sessions will be held for each of the following groups:
 - 1. Engineers.
 - 2. Plant Operators (Minimum of 4 sessions over three weeks).
 - 3. Mechanical Maintenance Technicians (Minimum of 2 sessions).
 - 4. Electrical/ Instrumentation Maintenance Technicians (Minimum of 2 sessions)
- D. Prior to project closeout and field acceptance testing, provide training plan and schedule including the following information:
 - 1. List of all classes/courses.
 - 2. Description of course.
 - 3. Duration of course.
 - 4. Sequence of courses.
- E. Provide competent, factory authorized personnel to provide instruction to O&M personnel. Include sufficient hours of training to provide complete training for operation and maintenance of the equipment and system.
- F. Provide the name and resume of proposed instructor; instructor must have at least 5 years' experience teaching the designated course. Instructor's primary language must be English.
- G. Provide training manual that includes, as a minimum, the following:
 - 1. Course objective.
 - 2. Course outline.
 - 3. Theory of operation.
 - 4. Case studies that demonstrate application, operation (including casualty control), troubleshooting, repair and maintenance of equipment.
 - 5. Notes that supplement and enhance information provided in the manufacturer's operation and maintenance manuals.
 - 6. Thorough review of applicable drawings, photos, tables, diagrams and schematics.

7. List of references for further independent study.
- H. Owner reserves the right to require Vendor to repeat training classes if the objectives of such training are not met at the satisfaction of Owner. The costs of such required additional training sessions shall be borne by Vendor.
- I. Owner reserves the right to video record the training sessions.
- J. Overview training for all groups:
 1. Course shall cover, as a minimum, the following topics for 15 to 20 persons:
 - a. Thorough description of the engine generator equipment, interconnections, functions and capabilities.
 - b. Review system terminology, abbreviations and acronyms.
- K. Operator Training:
 1. Operator-training course shall be conducted at times that accommodate a multiple shift schedule. A minimum of four eight-hour, on-site training sessions are required.
 2. The course shall be an in-depth instruction on the engine generator and Package equipment.
 3. The course shall enable the Owner's operators to be proficient in the following topics, as a minimum:
 - a. Start-up, Normal Operation and shutdown of equipment.
 - b. Response actions to equipment failures.
 - c. Response to system alarms.
 - d. Modifying and locating setpoints.
 - e. Review interface to process control system.
- L. Mechanical Maintenance Training:
 1. Mechanical maintenance shall be conducted in two separate and identical sessions in order to train half of the workforce at one time.
 2. The course shall be an in-depth instruction on the engine generator and Package equipment.
 3. The course shall enable the Owner's mechanical maintenance personnel to be proficient in the following topics, as a minimum:
 - a. Response actions to mechanical equipment failures.
 - b. Response to system alarms.
 - c. Normal mechanical maintenance requirements and procedures for engine generator equipment.

M. Electrical/Instrumentation Maintenance Training

1. Electrical/Instrumentation maintenance shall be conducted in two separate and identical sessions in order to train half of the workforce at one time.
2. The course shall be an in-depth instruction on the engine generator and package equipment.
3. The course shall enable the Owner's electrical/instrumentation maintenance personnel to be proficient in the following topics, as a minimum:
 - a. Start-up, normal operation and shutdown of control equipment.
 - b. Response actions to hardware and software failures including restoration/reloading software on a new machine after equipment failure.
 - c. Response to control system equipment alarms.
 - d. Modifying and locating setpoints.
 - e. Review interface to process control system.
 - f. Control loop tuning concepts, strategies, and methods.
 - g. Normal electrical/instrumentation maintenance requirements and procedures for engine generator equipment.

N. Provide certification in writing that this Training has been accomplished.

3. CODES AND STANDARDS

1.7 REFERENCED CODES AND STANDARDS

- A. The equipment, materials and services furnished under this Specification shall meet or exceed the requirements of all applicable federal, state and local codes; standards and regulations; and the applicable codes, standards, and specifications of the following organizations:
1. AISC - American Institute of Steel Construction
 2. AISI - American Iron and Steel Institute
 3. ANSI - American National Standards Institute
 4. ASME - American Society of Mechanical Engineers
 5. ASTM - American Society for Testing and Materials
 6. AWS - American Welding Society
 7. EPA - Environmental Protection Agency
 8. FM – Factory Mutual
 9. FEMA – Federal Emergency Management Agency
 10. IEC – International Electrotechnical Commission
 11. IEEE – Institute of Electrical and Electronic Engineers
 12. IRI – Industrial Risk Insurers
 13. ISA – International Society of Automation
 14. ISO – International Standards Organization
 15. NEMA - National Electrical Manufacturers Association.
 16. NETA – International Electrical Testing Association
 17. NFPA - National Fire Protection Association
 18. NIST - National Institute of Standards Technology
 19. OSHA - Occupational Safety and Health Administration.

20. SAMA - Scientific Apparatus Makers Association
 21. UL - Underwriters' Laboratories
- B. The following documents shall form part of this Specification:
1. ANSI B16.5 - Pipe Flanges and Flanged Fittings
 2. ASME B31.1 - Power Piping
 3. ASME PTC 17 - Performance Test Code on Reciprocating Internal Combustion Engines
 4. AWS D1.1 - Structural Welding Code
 5. ISO 8528 – Reciprocating Internal Combustion Engine Driven Alternating Current Generating Sets (inclusive of all applicable sections/parts)
 6. NESC – National Electric Safety Code
 7. NFPA-70 - The National Electric Code (NEC)
 8. NFPA 37 – Standard for the Installation and Use of Stationary Combustion Engines
- C. While a number of applicable sections of the aforementioned codes and standards have been identified in sections of this Specification, the Vendor has the ultimate responsibility for the complete identification and execution of all applicable sections of the aforementioned codes and standards.
- D. Unless otherwise stated, these codes, standards or material Specifications shall be the latest revisions, including all effective publications, supplements, addenda and editions, in effect at the issuance date of this document.
- E. These codes and standards set forth the minimum requirements. These may be exceeded by the Vendor if, in its judgment and with Owner's acceptance, superior or more economical designs or materials are available.
- F. The most severe requirements shall prevail in the event of conflict between requirements, Specifications and applicable and governing codes. All conflicts among the Codes, Specifications and/or purchase order and/or the contract shall be brought to the Owner's and Engineer's attention for written resolution prior to release for fabrication.
- G. It is the Vendor's responsibility that all equipment and materials furnished and installed be in strict conformity with all current, applicable codes and regulations of the Commonwealth of Puerto Rico. Violations resulting from stipulations in the existing codes shall be corrected by the Vendor at its own expense.
- H. The Vendor shall be responsible for obtaining copies and paying all costs of all applicable codes and regulations.

4. PROJECT APPLICATION

- A. Puerto Rico Ports Authority (PRPA) is constructing a new power generating facility to furnish electrical power to the Luis Muñoz Marín International Airport (LMM) and other facilities on the PRPA property in San Juan, Puerto Rico. The engine generators will be installed in a new power generating facility to be constructed on the PRPA property. The engine generator stack will be routed through the building roof and terminate above the roof line.
- B. The engine generators in this Specification will be part of a power generating facility power block which will include the engine generators, an energy storage device (battery or otherwise supplied by Owner) and a black start diesel generator (supplied by Owner). The engine generators will supply base power and the energy storage device will be used to address fluctuations in the power demand in island mode operation. There will be a GCS

(i.e. microgrid controller; supplied by Owner) which will control the generators within the power plant and a PCS (supplied by Owner) which will control miscellaneous balance of plant equipment and archive engine generators' alarm as specified herein. The engine generators shall have the capability of interfacing with the GCS. The GCS will provide a demand signal to the engine generators to modulate load to accommodate variations in electric demand. Due to the unpredictable nature of island operation, it is expected that the engines may operate at loads of 25 to 100 percent for limited durations as loads are brought online.

- C. The power block as described above shall be capable of operating in an island mode to satisfy PRPA electric loads without dependency on the utility grid. The unit governor response time shall be compatible with this operation. Controls and operation of the engine generators working in synch with the GCS shall be suitable for normal operation in parallel with the Puerto Rico electric grid operated by PREPA/LUMA.
- D. The engine generators will be mounted indoors. Combustion and ventilation air will be drawn through the building's exterior walls through wall louvers (by others). Combustion air will be ducted to the interface of the engine generator's filtration system. Engine and lube oil cooling to be provided by Vendor furnished radiators mounted on the roof of the engine room. Roof mounted cooler, heat exchangers, pumps, control valves, and associated instrumentation to be provided by Vendor. Interconnecting piping for cooling system to be provided by others based on material specifications and design details provided by the Vendor. Refer to Exhibit B for general arrangement of engine generators and associated equipment.
- E. Based upon the anticipated power demand profiles for the facility, the targeted peak electrical production is 12,000 kW. The design intent of the plant is to install syngas-fueled engines meeting the required capacity of 12,000 kW, with one engine generator installed as backup. One 2,000 kW additional diesel fuel-powered engine generator will be included in the facility for black start and grid stability during island operation.
The engine generators shall be capable of sustained operation with fuel consisting of a propane-air mixture known herein as "SYNGAS". Vendor shall specify required gas pressure and quality to the engine generator package. Copies of existing fuel analyses are included as Exhibit D.
If applicable, engine generator Vendor shall provide a proposal alternate price for an oversized generator which would allow the engine to be modified at a later date to operate on natural gas, with full output capability.
- F. Asbestos, polychlorinated biphenyls (PCBs) and lead-based paint shall not be used anywhere in the equipment supplied by Vendor, including sub-vendors. Use of ceramic fiber shall be noted where used. Vendor shall comply with all Federal and local environmental regulations regarding the use of materials. Vendors are encouraged to use sustainable materials and reduce maintenance materials where possible.
- G. Instrument Air will be available from the owner at 125 psig Maximum; 80 psig Minimum pressure.
- H. The engine generator shall be started via compressed air, battery power, or an approved alternative. Engine starting equipment to be supplied by the vendor.
- I. Site ambient conditions and other design criteria are shown in Attachment E of the **RFP 23J-09392**.

5. WARRANTY

Equipment to be warranted for two (2) year warranty from date of initial start-up of the system. Warranty shall include repair parts, labor, reasonable travel expense necessary for repairs at the job site, and expendables (lubricating oil, filters, antifreeze, and other service items made unusable by the defect) used during the course of repair. Submittals received without written warranties as specified will be rejected in their entirety.

6. SEQUENCING AND SCHEDULING

- A. Prerequisite Activities and Lead Times: Do not start following key project activities until prerequisite activities and lead times listed below have been completed and satisfied.
- B. Shop Drawing Reviews by Engineer:
 - 1. Prerequisite: Engineer acceptance of schedule of values and progress schedule.
 - 2. PLC and HMI Software Development Prerequisite: PLC and HMI coordination meetings (Minimum of 2) with the Owner, Vendor, and Engineer.
- C. Factory Test Prerequisite:
 - 1. Associated test procedures submittals completed.
 - 2. PLC and HMI Software Meeting 1 completed.
 - 3. PLC and HMI Application (Draft) Software Shop Drawings approved.
 - 4. PLC and HMI Software Meeting 2 is completed.
- D. Training Prerequisite: Associated Training Plan Submittal is completed and approved.
- E. PLC and HMI Configuration Training Session 1 Prerequisite:
 - 1. PLC and HMI Software shop drawings approved.
 - 2. Factory Demonstration Test (FDT) is completed.
- F. New Control Panel Shipped to the Site: General Prerequisites:
 - 1. Approval of Vendor shop drawings and preliminary operation and maintenance data.
 - 2. FDT completed.
- G. PLC and HMI Applications Software Installation Prerequisite:
 - 1. PLC and HMI software shop drawings approved.
 - 2. FDT completed.
- H. Performance Test Prerequisite:
 - 1. FDT completed.
 - 2. Control panel shipped to and installed at site.
 - 3. PLC and HMI applications software installation complete.
 - 4. FDT completed and facility started up.

7. VENDOR COORDINATION MEETINGS

- 1. Vendor Schedule Coordination Meeting:
 - a. Timing: Following Engineer review of Vendor schedule. Schedule includes submittals, factory testing, shipment of equipment, field testing & start-up, and training.

- b. Purpose: Discuss Owner's and Engineer's comments and resolve scheduling issues.
 2. Startup and Training Coordination Meeting:
 - a. Timing: Following Owner and Engineer review of preliminary testing and training plan submittals.
 - b. Purpose:
 - 1) Startup and test planning.
 - 2) Resolve required changes to proposed training plan.
 - 3) Identify specific Owner personnel to attend training.
 3. PLC and HMI Software Design (Programming) Meetings:
 - a. Two meetings minimum are required. Specific meeting dates will be established in the progress schedule.
 - b. Attended By: Engineer, Owner, and Vendor
Purpose:
 - 1) PLC and HMI Software Design Meeting 1: Review and discuss the Applications Software (programming) Draft submittal which includes the Control Panel preliminary OIU graphics, PLC control narratives, and HMI graphics.
 - 2) PLC and HMI Software Design Meeting 2: Review and discuss the Applications Software (programming) submittal prior to the FDT.

8. DOCUMENTATION

- A. Submittal Drawings and Catalog Data:
 1. Refer to Exhibit E for a tabulation of the required submittals for this scope of work.
 2. Failure to comply with the submittal requirements defined herein, shall not be justification for schedule delays or change orders.
 3. Submittals will be submitted only by Vendor. Indicate by signed stamp that Documents have been checked, that the work shown in the submittals is in accordance with Purchase Order and/or Contract requirements, and that dimensions and relationship with work of other trades have been checked. Submittals submitted for review that have not been checked and signed by Vendor will be returned for checking before being considered by the Engineer.
 4. All documents, drawings, and data submitted shall be in the English language, with all dimensions in USCS (United States Customary System) units.
 5. Include indication, via highlighting or other means, any information relevant to the particular equipment or materials to be furnished where product data published by the manufacturer is part of submittal.
 6. Provide documentation of compliance with manufacturer's published literature or drawings or letter signed by an officer of manufacturer in cases where compliance with UL, FM, IRI, or other similar organization standards are required.
 7. Furnish submittal schedule with proposal.
 8. Include identifying symbols, tag names, and equipment numbers as defined in the Tagging and Marking requirements within to allow for full integration with the installation design documents for all equipment and material submitted.
 9. Submit requested submittals complete by types of equipment labeled with applicable specification section(s) included. Each submittal will be handled separately. Should any item not be acceptable, the entire submittal will be returned to Vendor for correction and resubmittal. Partial submittals will not be acceptable. The intent of this requirement is that all approved bound sets of data will be identical and will contain only acceptable information.

10. Submit a compliance sheet for each submittal indicating the submittal is in full compliance with the drawings and Specifications. Indicate by drawing number or specification section number and paragraph numbers all exceptions taken and include an explanation.
11. The review of submittals does not relieve or modify Vendor's responsibility for compliance with design documents or dimensions or errors contained in the submittal or quantity count. It is clearly understood that noting of some discrepancies but not identifying others does not grant Vendor permission to proceed in error. Regardless of any information contained in the submittals, design documents govern the work and are neither waived nor suspended in any way by the review of the submittals.
12. A minimum review period of two weeks, exclusive of transmittal time, will be required in the Engineer's office for each submittal. Take this time period into consideration when scheduling work.
13. Include in submittals sufficient plans, elevations, sections, performance data, dimensions, bolt locations, ratings, sound data, weights and schematics to clearly describe the equipment and to show compliance with these Specifications. Provide a cover or title sheet for the submittal containing the following:
 - a. Name of Vendor originating the submittal.
 - b. Name of project for which the submittal is made.
 - c. An index of all items submitted including:
 - 1) Mark of equipment on drawings.
 - 2) Manufacturer.
 - 3) Catalog number.
 - 4) Specific section number.
 - 5) Date of submittal and date of each revision.
 - 6) Vendor's certification of review.
 - 7) Vendor's certification of compliance.
14. Drawings and data which do not comply with specified requirements will be returned for resubmittal. One copy will be returned to Vendor marked FURNISH AS SUBMITTED, FURNISH AS CORRECTED, REVISE AND RESUBMIT or REJECTED. If it is marked FURNISH AS SUBMITTED or FURNISH AS CORRECTED, no additional submittal is required. If it is marked REVISE AND RESUBMIT or REJECTED, repeat the submittal in accordance with this section. It is intended that Vendor submit complete and accurate shop drawings and product data at the first submittal.
15. If the drawing or product data marked FURNISH AS SUBMITTED or FURNISH AS CORRECTED is altered for any reason after it has been stamped, the REVIEWED stamp shall automatically be voided.
16. Provide all work in accordance with the submittals stamped FURNISH AS SUBMITTED or FURNISH AS CORRECTED in as much as they are in agreement with design documents. Where differences occur between the submittals and design documents, design documents shall govern the work.
17. The following additional submittal requirements shall be met:
 - a. Each submitted drawing and document shall include the following Owner project identification:

CLIENT NAME/PROJECT NAME/NUMBER
 - b. The data, documents, drawings, SAMA logic diagrams, and manuals shall be submitted in digital form for each review cycle, except for the final

- approved/certified drawings which shall be submitted in hard copy form as part of the O&M documentation as specified below.
- c. The digital form shall be in software compatible with industry standards (Excel, Word, AutoCAD, 3D AutoCAD, CADWORKS, etc.). If proprietary software is utilized, necessary viewing software shall be furnished by the Vendor.
 - d. Minimum size for hard copy drawings is 11" x 17" and must be clear and fully reproducible. Larger sizes are acceptable but must be folded to 8-1/2" x 11" for binding in the O&M manuals. Cut sheets, product data, specifications, and narratives may be 8-1/2" x 11".
 - e. All "Certified Final" reference data/drawings submitted after the order shall be provided on hard drives, USB, or other approved media, in addition to the stated hard copies. Files may be delivered via cloud-based host with secure access.
 - f. Include Vendor's certificate that products meet or exceed specified requirements.
18. Final Submittal: In addition to the number of copies of shop drawings and product data required to review submittals, maintain separate file of final reviewed copies of such material. Deliver approved submittals in hardback binder for Owner's use. Incorporate changes and revisions made throughout construction period.

B. Operation and Maintenance Manuals

- 1. Vendor shall provide six (6) hard copy sets of operations and maintenance manuals for all equipment and auxiliaries provided and an electronic pdf copy on two (2) hard drives or USB. Cloud based documentation hosted by the engine generator manufacturer is encouraged when live updates to the manuals are anticipated.
- 2. Organize binders to contain similar equipment such as piping, valves, transmitters, terminal boxes, sight glasses, relief valves, etc., in separate divisions. Provide a complete double index for each binder to include:
 - a. An alphabetized list of the products by name.
 - b. An alphabetized list of manufacturers whose products have been incorporated in the work, together with their addresses and the name, addresses and telephone numbers of the local sales representative or Vendor.
- 3. For each section of product, equipment or system, organize the data as follows:
 - a. Furnish a general description of the equipment or system listing the major components, intended service and other general data.
 - b. Furnish technical data including nameplate data (on a separate excel file), design parameters, normal operating bands, ratings, capacity, performance data, operating curves, etc. Clearly distinguish between information which does and does not apply.
 - c. List warnings and cautions to be observed during both installation and operations.
 - d. Provide fully detailed installation and operation instructions including special tools required, alignment instructions, start up and shut down sequences, emergency and casualty step-by-step procedures, and extended lay-up step-by-step procedures.

- e. Furnish maintenance, service and repair instructions including maintenance and service schedules, materials, and methods for performing routine and annual service.
- f. Furnish a cause and effects matrix where the 'Cause' is in a row which reflects a process change, the 'Effect' is in the column that reflects a process action, and the 'Intersection' is marked to show the cause/effect relation.
- g. Furnish a troubleshooting guide and check list indicating common failures, test methods and procedures for determining component fault or failure.
- h. Furnish a spare parts list indicating part and order number with name, address, and telephone number of Vendor. Include current prices of replacement parts and supplies.
- i. Furnish diagrams including controls, wiring, installation and operation of the equipment or system.
- j. HMI Graphics screens (complete - listing and color screen shots)
- k. Furnish cyber security controls procedure/methodology as to how the system is protected from cyber-attacks during production and how software upgrades are implemented post installation for future upgrades.
- l. Furnish list of all set points, interlocks, alarms and trip points in MS EXCEL file format.
- m. Furnish copies of all final approved submittal drawings and documents.
- n. Furnish all warranties and guarantees.

C. Routine Maintenance Schedule, Parts & Service

- 1. Provide a complete schedule of normally required inspection, preventative maintenance, predictive maintenance, and overhaul tasks and the outage hours required for all the equipment supplied under the purchase order and/or contract, plus replacement parts associated with each task. Provide inspection and maintenance plan required to support the minimum on-line availability specified herein. List requirements by year with a list of recommended spare parts for each through one entire cycle. Spare parts list shall consist of total/in-service quantity, recommended spare quantities, lead times and criticality factor.
- 2. Submit a line item pricing (proposal alternate) for recommended spare parts for 2 years of normal operation, including expendables, beyond first year of operation.
- 3. Submit an itemized list and pricing (proposal alternate) for all required tools including any special lifting fixtures to support on-site maintenance of engine generator Package(s).
- 4. Submit itemized pricing (proposal alternate) for Long Term Service Agreement (LTSA). Service agreement term to be 5 years or to first major overhaul, whichever is greater.
- 5. For each inspection, preventative maintenance and overhaul task, list the following:
 - a. Tools required
 - b. Materials required
 - c. Associated warnings and cautions
 - d. Initial system conditions required
 - e. Procedure (step-by-step)

D. Software

1. Provide a minimum of 3 licenses/copies of all proprietary software required for installation, testing, tuning, and operation of the equipment, instrumentation, and/or protective devices.
2. For any instrument or component which must be connected to a computer for testing, tuning, or programming and utilizes a proprietary cable, provide a minimum of two cables to the Owner.
3. Provide software patches and revisions (versions) during the LTSA term.

9. **QUALITY ASSURANCE**

- A. Provide manufacturer's certification that materials meet or exceed minimum requirements as specified.
- B. The Vendor shall have in place a complete and functioning comprehensive Quality Assurance program covering the design, procurement, fabrication, packaging and delivery of the specified equipment and materials. This program shall ensure that the equipment and materials furnished by the Vendor meet the requirements of this Specification as well as the Vendor's own procedures (step-by-step) and processes.
- C. It shall be the Vendor's responsibility to ensure that the Vendors, and Sub-vendors meet the intent of this requirement and are able to demonstrate their compliance.
- D. Owner or its representative shall be given opportunity to witness all testing.
- E. The Owner reserves the right to reject equipment and or components which require major modification or alteration to meet Specifications.
- F. Non-conformances to this Specification and major equipment or component repairs that occur shall be documented and approved by the Owner in writing prior to testing and shipment.
- G. Software Quality Assurance (SQA):
 1. Establish an SQA plan that addresses software tests normally performed by programmers and tests performed to verify system operation.
 2. Perform software tests to benchmark functional evaluations, including the following:
 - a. Conformance to specification.
 - b. Language deviation.
 - c. Error handling.
 - d. Operational speed.
 - e. Maintain a software error log to record occurrence, solution, and corrected resolution.
 - f. Provide software programming as required to perform functions as specified. Provide annotations in the programming describing functions and changes such that the Owner and others in the future can understand the logic so that changes can be readily made.
 - g. Provide software licensed to the Owner in perpetuity.

EXHIBITS

Exhibit A: Performance Tables

Proponents shall furnish the performance data and utility requirements summarized in the following tables. In addition, Vendor shall provide a set of performance correction curves illustrating the impacts on engine generator net power output and net heat rate of the following parameters as a minimum:

- Ambient temperature
- Ambient relative humidity
- Intake pressure drop
- Exhaust backpressure
- Any other relevant parameters specific to Vendor's equipment

Proponents shall also furnish voltage and frequency versus time curves as summarized in the following tables. Curves shall be provided for both a single islanded engine generator at normal operating temperatures as well as two engine generators operating in parallel

As an alternative, Vendor may furnish performance software (or access to Vendor's online software) which allows for calculation of unit performance corrections for parameters noted above.

Note: Proponents shall submit completed performance data sheets for the proposed engine generator.

Exhibit B: CEP Plant General Arrangement Drawings

Exhibit C: Conceptual Network Architecture Diagram

Exhibit D: Fuel Sample Analysis

NAME	METHOD	UNIT	RESULT
Natural gas analysis	GPA 2261		
Hydrogen		mol %	<0.01
Oxygen		mol %	11.94
Nitrogen		mol %	38.94
Carbon Dioxide		mol %	0.09
Methane		mol %	0.92
Ethane		mol %	0.40
Propane		mol %	46.99
Isobutane		mol %	0.34
N-Butane		mol %	0.25
Isopentane		mol %	0.01
N-Pentane		mol %	0.01
Hexanes Plus		mol %	0.11
Hydrogen Sulfide		mol %	<0.10
Total		mol %	100.00
Relative Density		-	1.25689
Compressibility Factor		-	0.99443
Gross Heating Value (Real)		Btu/CF	1224.3
Net Heating Value (Real)		Btu/CF	1126.3
Pressure Base		psi	14.696
Molecular Weight		#/#-mol	36.2

Exhibit E: Submittal Requirements