



## **AUXILIARY POWER SYSTEM FOR WELL NO. 10**

### **EVENT NO. 6691**

#### **SPECIFICATIONS AND SPECIAL CONDITIONS**

- 4.0 The purpose of these specifications is to describe requirements for labor, materials, equipment, and services required for the purchase and commissioning of new emergency standby power generation equipment for City of Savannah Well No. 10.

To submit pricing electronically for this event, enter pricing for each line item shown under the lines tab on the event summary. To enter pricing manually, complete the attached bid proposal form. Manually submitted bids must be submitted on the bid proposal forms contained in these specifications in order to be considered.

A pre-bid conference has been scheduled to be conducted at the Purchasing Office, 1375 Chatham Parkway, 2<sup>nd</sup> floor, Savannah, Georgia 31405. This meeting will allow contractors to discuss the specifications and resolve any questions and/or misunderstandings that may arise with City staff. You are invited to attend.

#### 4.1 Scope of Work

The successful bidder shall be responsible for providing power generation equipment assemblies, sub-assemblies, components, and services required to install standby power system at City of Savannah Well No. 10.

#### 4.2 Equipment and Services

The equipment/material/services shall consist of the following:

- A. A 250 kW diesel engine driven electrical standby power generating set (277/480 volt, three (3) phase, 60 hertz, 1800 RPM).
- B. Materials/services to install generator outside of well house (includes a properly sized and designed concrete slab).
- C. Ancillary equipment assemblies/components.
- D. Materials/services required to connect new generator set. The generator set needs to be an 800 gallon sub base set/in-skid mounted.
- E. Delivery and mounting of the generator set at the operational site.
- F. Technical services/labor for final acceptance testing and commissioning.

#### 4.2.2. Equipment Description

Diesel-engine powered generator set and ancillary equipment to include the following:

- 1. Four (4) cycle diesel powered prime mover, UL-2200 listed, Tier III emissions certified.
- 2. Heavy-duty common skid-base.
- 3. Drain extension line for lube oil.

4. PMG excited, twelve (12) lead re-connectable generator.
5. Electric governor with frequency reg. +/- 0.25%.
6. Critical grade exhaust silencer with stainless steel flex and tailpipe.
7. Unit mounted radiator capable of 122 degrees Fahrenheit.
8. Engine jacket water heater, 2500W, 240V.
9. Battery charging alternator.
10. 10A battery charger, float/equalize with alarm contacts, 120 VAC.
11. Engine coolant 50/50 mix and engine oil.
12. The generator shall meet or exceed all emergency standby power ISO standards.
13. The generator set-mounted control system shall have the following features:
  - A. Integrated isochronous governing and fuel control in accordance with ISO 3046, AS 2789, DIN 6271, and BS 5514 standards.
  - B. An integrated 3-Phase sensing voltage regulation system with automatic single and three (3) phase fault regulation.
  - C. Integrated AC protective functions to include over/under voltage, short-circuit, over-current, and overload protective warning and shut-down features.
  - D. An integrated engine management system to include configurable cycle-cranking functions and configurable start sequencing.
  - E. A comprehensive warning and shut-down protection system to include configurable warning and shut-down conditions.
  - F. Data display(s) to include phase, voltage, amperage, frequency, load current, engine oil pressure, coolant temperature, DC voltage/current, non-resettable engine elapsed (run) hours, fault status, and a fault reset function.
  - G. The control panel shall be of NEMA 3R or better construction.
  - H. Pre-alarms for low oil pressure and high engine temperature.
  - I. Alarm indicators for low coolant temperature, low oil pressure, high engine temperature, low coolant temperature, low fuel level.
  - J. Shutdown indicators for low oil pressure, high engine temperature, low coolant level, over-speed, and over-crank.
14. Level 3 - Legacy (Sound Attenuated Enclosure) Powder Coated .090 Aluminum Rugged and Durable 150 MPH Wind Rated Enclosure with Exhaust Hood Pitched Roof for Increased Structural Integrity and Improved Watershed Punched Intake with Baffle and Punched Exhaust Openings Keyed Alike Lockable Doors with Draw Down Latches and Stainless Steel Component

Hinges Additional 1.5” Thick Poly damp Type D Acoustical Foam (PAF) Formed Steel Base with Mounting and Lifting Holes Includes Vibration Mounts to Isolate Unit from Base Rail

#### 4.3 Testing, Commissioning, and Final Acceptance

Onsite start-up, testing, and system commissioning shall be accomplished by a manufacturer’s factory certified representative. City of Savannah personnel shall be present to witness these procedures and to assist with equipment operation during all testing, commissioning, and acceptance activities.

##### 4.3.1 Activities and demonstrations shall include the following:

1. Install starting battery(s) and associated cabling. Connect/adjust the battery charger-maintainer as necessary.
2. Install flexible fuel lines, fittings, and loss-of-prime prevention devices. Inspect any feeder fuel piping and verify that it is correctly installed. Prime the generator set fuel system.
3. Inspect and verify that all electrical load and control wiring to/from the generator and ATS are properly installed and that terminations are tightened to the correct torque value.
4. Inspect and verify that all of the various sub-assemblies (housing, fuel tank, etc.) are correctly assembled.
5. Start and run the generator unit under no load conditions and verify that the correct voltage, frequency, and phase rotation is present at the generator load breaker output terminals. Allow the unit to run for a sufficient time to achieve normal operating temperature and verify the correct operation of the engine thermostat.
6. Verify the correct operation of all engine safety and alternator protection shut-down and warning functions by simulating the applicable fault.
7. Load test the generator set at 100% of rated load for one (1) hour.
8. Demonstrate a successful single-step pick-up of a 100% rated load.
9. Verify that the phase rotation and “hi leg” at the emergency terminals of the ATS match the normal (utility) terminals as applicable. Correct as necessary.
10. Verify correct system operation under simulated power failure and restoration conditions with the site load applied.
  - A. The system shall automatically respond to a power failure condition by starting the generator and correctly transferring the load to the emergency power source. Verify the correct operation of all applicable time delay functions.
  - B. With the site loads operating on emergency power, start and run all station loads and verify that there is no relay drop-out or degradation of function of any station subsystem while operating on emergency power due to motor starting in-rush effects or other anomalies of the station load(s). Stagger-starting of the station loads shall be permissible.
  - C. The system shall automatically respond to normal power restoration by re-transferring the load to the normal power source and returning to a standby ready condition. Verify the correct operation of all applicable time delay functions.

#### 4.4 Site Information

Well No. 10, 0 Augusta Avenue, Savannah, Georgia 31415

#### 4.5 Additional Instructions

4.5.1 The successful bidder shall provide the below technical drawings and information to the Water Supply Superintendent Office no later than five (5) working days following notice of contract award.

4.5.2 The generator set shall be provided with a comprehensive warranty covering a five (5) year or 1500 hour operational period whichever comes first.

#### 4.6 Insurance Requirements

Insurance Requirements are non-negotiable.

##### 4.6.1 Comprehensive General Liability

Contractor shall carry comprehensive general liability on an occurrence form with no "x, c or u" exclusions with the following minimum limits:

- Each occurrence - \$1,000,000
- Damage to Rented Premises - \$50,000
- Medical Expense - \$5,000
- Personal & Adv. Injury - \$1,000,000
- General Aggregate - \$2,000,000
- Products – Completed Ops. Aggregate - \$2,000,000

General aggregate shall apply on a per project basis.

Contractor will provide a Certificate of Insurance reflecting required coverage.

A waiver of subrogation endorsement to the policy in favor of the City shall also be provided and attached to the certificate.

A (30) day notice of cancellation in favor of the City must be endorsed to policy and attached to the certificate.

##### 4.6.2 Commercial Automobile Liability

The automobile policy must include coverage for owned, non-owned and hired automobiles

- Minimum limits are \$1,000,000
- Contractor will provide a Certificate of Insurance reflecting required coverage.
- A waiver of subrogation endorsement to the policy in favor of the City shall also be provided and attached to the certificate.
- A (30) day notice of cancellation in favor of the City must be endorsed to policy and attached to the certificate.

##### 4.6.3 Workers Compensation

Contractor shall carry a workers compensation policy including all statutory coverage required by Georgia state law.

Minimum employer's liability limits:

- \$500,000 each accident
- \$500,000 each employee (disease)
- \$500,000 policy limit (disease)

Contractor will provide a Certificate of Insurance reflecting required coverage.

A waiver of subrogation endorsement to the policy in favor of the City shall also be provided and attached to the certificate.

A (30) day notice of cancellation in favor of the City must be endorsed to policy and attached to the certificate.

#### 4.6.4 Umbrella/Excess Liability

Contractor shall carry an umbrella/excess liability policy which must follow form over underlying policies: general liability, auto liability and employer's liability.

Minimum limits:

- \$1,000,000 per occurrence
- \$1,000,000 aggregate

Contractor will provide a Certificate of Insurance reflecting required coverage.

Waiver of subrogation endorsement to the policy in favor of the City shall also be provided and attached to the certificate.

A (30) day notice of cancellation in favor of the City must be endorsed to policy and attached to the certificate.

#### 5.0 General Conditions

5.1 The bid response must include the following documents in this order:

- Bid Proposal Form (as a cover sheet)
- Exception Sheet
- Non-Discrimination Statement
- Other submittals as stated

All referenced documents must be completed and returned in their entirety to constitute a complete bid.

5.2 Original invoices should be sent to:

City of Savannah  
Accounts Payable  
P.O. Box 1027  
Savannah, Georgia 31402

5.3 The vendor is responsible for determining and acknowledging any addenda issued in connection with this bid solicitation. All addenda issued for this event must be acknowledged in order for a bid to be considered.

- 5.4 To be awarded bids, vendors must be registered as suppliers on the City of Savannah's website at [www.savannahga.gov](http://www.savannahga.gov).
- 5.5 This contract will be awarded to the vendor offering the lowest net price to the City, and meeting or exceeding all specifications herein.

**EXCEPTION SHEET**

Event # 6691

If the commodity(ies) and/or services proposed in the response to this bid is in anyway different from that contained in this proposal or bid, the bidder is responsible to clearly identify by specification section number, all such differences in the space provided below. Otherwise, it will be assumed that bidder's offer is in total compliance with all aspects of the proposal or bid.

Below are the exceptions to the stated specifications:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Company

\_\_\_\_\_  
Title

**BID PROPOSAL FORM**

**(SUBMIT AS THE COVER SHEET)**

City of Savannah Purchasing Department  
1375 Chatham Parkway  
2<sup>nd</sup> floor  
Savannah, Georgia 31405  
ATTN: Purchasing Director

**EVENT NUMBER: 6691**

**Business Location: (Check One)**  
 Chatham County  
 City of Savannah  
 Other

**ALL BIDDERS MUST BE REGISTERED VENDORS ON THE CITY'S WEBSITE TO BE AWARDED AN EVENT. PLEASE REGISTER AT WWW.SAVANNAHGA.GOV.**

**MANUALLY SUBMITTED BIDS MUST BE SUBMITTED ON THIS BID PROPOSAL FORM IN ORDER TO BE CONSIDERED.**

Name of Bidder: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

**DO YOU HAVE A BUSINESS TAX CERTIFICATE ISSUED IN THE STATE OF GEORGIA? (CHECK ONE) YES: \_\_\_\_\_ NO: \_\_\_\_\_**

**FROM WHAT CITY/COUNTY \_\_\_\_\_  
TAX CERTIFICATE #: \_\_\_\_\_ FED TAX ID #: \_\_\_\_\_**

**INDICATE LEGAL FORM OF OWNERSHIP OF BIDDER (STATISTICAL PURPOSES ONLY):  
CHECK ONE:  CORPORATION  PARTNERSHIP  
 INDIVIDUAL  OTHER (SPECIFY: \_\_\_\_\_)**

**Do you plan to subcontract any portion of this project? Yes \_\_\_\_\_ No \_\_\_\_\_  
If yes, please complete the attached schedule of DBE participation. Also complete the schedule if you will be using any DBE suppliers.**

**ADDENDA ACKNOWLEDGEMENT**

My signature below confirms my receipt of all addenda issued for this proposal.

\_\_\_\_\_  
Signature

\*This acknowledgement is separate from my signature on the fee proposal form. My signature on the fee proposal form will not be deemed as an acknowledgement of addenda.

THE UNDERSIGNED PROPOSES TO FURNISH THE FOLLOWING ITEMS IN STRICT CONFORMANCE TO THE BID SPECIFICATIONS AND BID INVITATION ISSUED BY THE CITY OF SAVANNAH FOR THIS BID. ANY EXCEPTIONS ARE CLEARLY MARKED IN THE ATTACHED COPY OF BID SPECIFICATIONS.

ITEM NO	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
1	Turnkey installation of 250 kW diesel engine driven electrical standby power generating set	1 LOT		

TOTAL BID \$ \_\_\_\_\_

**PAYMENT TERMS: PLEASE CHECK ONE AND FILL IN BLANKS**

(Minimum of 10 working days must be allowed for discount to be considered in bid award)

\_\_\_ Less \_\_\_ % \_\_\_ Days Prompt Payment Discount (if offered) (\_\_\_\_\_)

\_\_\_ Net - 30 Days (no discount offered) - 0 -

TOTAL NET BID \$ \_\_\_\_\_

=====

TIME REQUIRED FOR INSTALLATION AFTER RECEIPT OF ORDER: \_\_\_\_\_ DAYS

DO YOU HAVE THE REQUIRED INSURANCE? \_\_\_\_\_

I certify this bid complies with the General and Specific Specifications and Conditions issued by the City except as clearly marked in the attached copy.

\_\_\_\_\_  
Please Print Name

\_\_\_\_\_  
Authorization Signature

\_\_\_\_\_  
Date

**CONTRACTOR AFFIDAVIT AND AGREEMENT**  
Employment Eligibility Verification

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with the City of Savannah has registered with and is participating in a federal work authorization program\* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with the City of Savannah, contractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A. 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or a substantially similar form. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the City of Savannah at the time the subcontractor(s) is retained to perform such service.

\_\_\_\_\_  
EEV / Basic Pilot Program\* User Identification Number

BY:

\_\_\_\_\_  
Contractor Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorized Officer or Agent

\_\_\_\_\_  
Printed Name of Authorized Officer or Agent

\_\_\_\_\_  
Title of Authorized Officer or Agent of Contractor

\*As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the "EEV / Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

\* \* \* \* \*

## **Instructions for Completing Contractor Affidavit and Agreement Form**

As required under Senate Bill 529 – “Georgia Security and Immigration Compliance Act” of 2006, O.C.G.A. Section 2, Article 3 13-10-91, public employers, their contractors and subcontractors are required to verify the work eligibility of all newly hired employees through an electronic federal work authorization program. The Georgia Department of Labor has added a new Chapter 300-10-1, entitled "Public Employers, Their Contractors and Subcontractors Required to Verify New Employee Work Eligibility Through a Federal Work Authorization Program," to the Rules and Regulations of the State of Georgia. (See website: [http://www.dol.state.ga.us/pdf/rules/300\\_10\\_1.pdf](http://www.dol.state.ga.us/pdf/rules/300_10_1.pdf).) The new rules designate the “Employment Eligibility Verification (EEV) Basic Pilot Program” operated by the U.S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security as the electronic federal work authorization program to be utilized for these purposes. The EEV/Basic Pilot Program can be accessed at: <https://verify.uscis.gov/enroll/StartPage.aspx?JS=YES>. Bidders shall comply with this new rule and submit with your bid the attached “Contractor Affidavit and Agreement.”

## ***Affidavit Verifying Status for City of Savannah Benefit Application***

By executing this affidavit under oath, as an applicant for a City of Savannah, Georgia Business License or Occupation Tax Certificate, Alcohol License, Taxi Permit, Contract or other public benefit as reference in O.C.G.A. Section 50-36-1, I am stating the following with respect to my bid for a City of Savannah contract for \_\_\_\_\_. [Name of natural person applying on behalf of individual, business, corporation, partnership, or other private entity]

1.) \_\_\_\_\_ I am a citizen of the United States.

**OR**

2.) \_\_\_\_\_ I am a legal permanent resident 18 years of age or older.

**OR**

3.) \_\_\_\_\_ I am an otherwise qualified alien (8 § USC 1641) or nonimmigrant under the Federal Immigration and Nationality Act (8 USC 1101 *et seq.*) 18 years of age or older and lawfully present in the United States.\*

In making the above representation under oath, I understand that any person who knowingly and willfully makes a false, fictitious, or fraudulent statement or representation in an affidavit shall be guilty of a violation of Code Section 16-10-20 of the Official Code of Georgia.

Signature of Applicant: \_\_\_\_\_ Date \_\_\_\_\_

Printed Name: \_\_\_\_\_

SUBSCRIBED AND SWORN  
BEFORE ME ON THIS THE  
\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_

\* \_\_\_\_\_  
Alien Registration number for non-citizens.

Notary Public  
My Commission Expires:

***Instruction for Completing Systematic Alien Verification  
for Entitlement (SAVE) Form***

O.C.G.A. § 50-36-1, requires Georgia’s cities to comply with the federal **Systematic Alien Verification for Entitlements (SAVE) Program**. SAVE is a federal program used to verify that applicants for certain “public benefits” are legally present in the United States. Contracts with the City are considered “public benefits.” Therefore, the successful bidder will be required to provide the Affidavit Verifying Status for City of Savannah Benefit Application prior to receiving any City contract. The affidavit is included as part of this bid package but is only required of the successful bidder.