



AUXILIARY POWER SYSTEM

EVENT NO. 5082

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. 29.

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, City Hall, third floor, 2 East Bay Street, Savannah, Georgia 31401. 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. 29.

- 4.2 Equipment and Services

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

- A. A 150 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 a 1200 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.

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).

4.4 Site Information

Well No. 29, Georgetown System, near intersection of Barksdale Drive and Red Fox Drive.

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.

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
- Proposed Schedule of M/WBE Participation
- 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.

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 #5082

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
3rd Floor, City Hall
P. O. Box 1027
Savannah, Georgia 31402
ATTN: Purchasing Director

EVENT NUMBER: 5082

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: _____)**

**INDICATE OWNERSHIP STATUS OF BIDDER
(CHECK ONE):**
 NON-MINORITY OWNED ASIAN AMERICAN
 AFRICAN AMERICAN AMERICAN INDIAN
 HISPANIC OTHER MINORITY (describe) _____
 WOMAN (non-minority)

Do you plan to subcontract any portion of this project? Yes _____ No _____
If yes, please complete the attached schedule of M/WBE participation. Also complete the schedule if you will be using any M/WBE suppliers.

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 and Materials for 150kW 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 DELIVERY/INSTALLATION AFTER RECEIPT OF ORDER:
 _____ DAYS

CONFIRM RECEIPT OF ANY ADDENDA ISSUED FOR THIS BID:

ADDENDUM _____ #

DATE _____

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

NON-DISCRIMINATION STATEMENT

The bidder certifies that:

- (1) No person shall be excluded from participation in, denied the benefit of, or otherwise discriminated against on the basis of race, color, national origin, or gender in connection with any bid submitted to the City of Savannah or the performance of any contract resulting therefrom;
- (2) That it is and shall be the policy of this company to provide equal opportunity to all business persons seeking to contract or otherwise interested in contracting with this company, including those companies owned and controlled by racial minorities, cultural minorities, and women;
- (3) In connection herewith, we acknowledge and warrant that this company has been made aware of, understands and agrees to take affirmative action to provide such companies with the maximum practicable opportunities to do business with this company;
- (4) That this promise of non-discrimination as made and set forth herein shall be continuing in nature and shall remain in full force and effect without interruption;
- (5) That the promises of non-discrimination as made and set forth herein shall be and are hereby deemed to be made as part of and incorporated by reference into any contract or portion thereof which this company may hereafter obtain and;
- (6) That the failure of this company to satisfactorily discharge any of the promises of non-discrimination as made and set forth herein shall constitute a material breach of contract entitling the City of Savannah to declare the contract in default and to exercise any and all applicable rights and remedies including but not limited to cancellation of the contract, termination of the contract, suspension and debarment from future contracting opportunities, and withholding and/or forfeiture of compensation due and owing on a contract.

Signature

Title

PROPOSED SCHEDULE OF M/WBE PARTICIPATION

All M/WBEs listed **must be certified as a minority-owned or women-owned business** by the City of Savannah or a federally-recognized or state-level certifying agency (such as USDOT, State DOT, SBA 8(a) or GMSDC) that utilizes certification standards comparable to the City of Savannah **prior** to the due date of this bid. **Other business certifications that do not specify majority woman or minority ownership may not be substituted.** **Proof of M/WBE certification from the certifying agency is required to accompany the bid.** A firm that has submitted an application for M/WBE certification but has not been certified is not qualified as a certified M/WBE and will not be recognized as such during the City’s evaluation process. To expedite verification, please provide accurate phone numbers for all M/WBEs listed and ensure firms understand contact will be made following bid submittal.

Name of Proposer: _____ Event No. _____

Project Title: _____

NOTE: Unless certified through the City of Savannah M/WBE Program, proof of M/WBE certification must be attached for all firms listed.

Name of M/WBE Participant	Name of Majority Owner	Telephone	Address (City, State)	Type of Work Sub-Contracted	Estimated Sub-contract Value	MBE or WBE	Certified ? (Y or N)	Certifying Agency? (City of Sav. or Other)
					%			
					%			
					%			
					%			
					%			
					%			

MBE Participation Value: _____ % WBE Participation Value: _____ % M/WBE Participation Value: _____ %

The undersigned will enter into a formal agreement with the M/WBE Subcontractors/Proposers identified herein for work listed in this schedule, conditioned upon executing a contract with the Mayor and Aldermen of the City of Savannah. The Prime’s subcontractor that subcontracts work must enter into a formal agreement with the tier subcontractor identified herein for work listed in this schedule. The Prime may count toward the goal any tier of M/WBE subcontractors and/or suppliers that will be utilized in the contract work. However, when an M/WBE subcontracts part of the work, the value of the subcontracted work may **only** be counted toward the goal **if the tier subcontractor is an M/WBE.** Any work an M/WBE firm subcontracts to a non-M/WBE firm **will not count toward the M/WBE goal.** It is the responsibility of the Prime contractor to advise all M/WBEs of this requirement and to ensure compliance by subcontractors.

Joint Venture Disclosure

If the prime bidder is a joint venture, please describe the nature of the joint venture, the level of work and the financial participation to be provided by the Minority/Female joint venture firm in the space provided below.

Joint Venture Firms	Level of Work	Financial Participation

Printed name (company officer or representative): _____

Signature: _____ Date: _____

Title: _____ Email: _____

Telephone: _____ Fax: _____

The Minority/Women Owned Business Office is available to assist with identifying certified M/WBEs. Please contact the M/WBE Office at (912) 652-3582. The City of Savannah’s certified M/WBE registry is posted on its website @ www.savannahga.gov.

Developing a Strong M/WBE Participation Plan

Key facts every bidder/proposer needs to know prior to developing their M/WBE Participation Plan:

1. All bidders/proposers must submit a "Proposed Schedule of M/WBE Participation" which identifies the minority and/or woman-owned companies that have agreed to participate in the project if awarded. All companies listed on the form must be certified as either minority-owned and controlled or woman-owned and controlled. The City does not accept a company's "self-identification" as minority or woman-owned.
2. **Proof** of M/WBE certification from the certifying agency is required to accompany the bid; and certification must have been completed by the City of Savannah, a federally-recognized or a state-level certifying agency (USDOT, State DOT, SBA 8(a) or GMSDC) utilizing certification standards comparable to the City of Savannah.
3. The certification must have been approved prior to the due date of this bid. A firm that has submitted an application for certification but has not been certified will not be counted toward the M/WBE goal.
4. The M/WBE Office **will be contacting all M/WBE firms** included in the bidder's M/WBE Plan to confirm each: a) was contacted by the bidder/proposer; b) performs the type of work listed; and c) agreed to participate.
5. To expedite the verification process, bidders/proposers need to: provide accurate phone numbers for all M/WBEs listed; ensure M/WBEs know to expect to be contacted by phone and email; request M/WBEs be accessible during the critical period before bid-opening; and advise M/WBEs that City staff **must** receive the M/WBE's confirmation that the firm agreed to participate in the bid/proposal in order for the prime contractor to receive credit toward their proposed M/WBE participation goals.
6. If a proposed M/WBE cannot be confirmed as certified, performing the type of work described or agreeing to participate, the bidder/proposer will be notified and given a pre-determined period to submit a correction. If an M/WBE still cannot be confirmed or replaced, the proposed percentage of participation associated with the unverified M/WBE firm will **not be counted** and **will be deducted** from the overall proposed M/WBE goal.
7. Any tier of M/WBE subcontractors or suppliers that will be utilized in the contract work may count toward the MBE and WBE goal **as long as the tier subcontractors/suppliers are certified M/WBEs**. Work that an M/WBE subcontracts to a non-M/WBE firm does **not** count toward the M/WBE goal.
8. M/WBEs must perform a "**commercially useful function**" which is the provision of real and actual work or products, or performing a distinct element of work for which the business has the skills, qualifications and expertise, and the responsibility for the actual management and supervision of the work contracted.
9. Per the *Proposed Schedule of M/WBE Participation* "the undersigned (bidder/proposer) will enter into a formal agreement with the M/WBE Subcontractors/Proposers identified herein for work listed in this schedule, conditioned upon executing a contract with the Mayor and Aldermen of the City of Savannah." **This signed commitment is taken seriously by the City**, so do not list M/WBEs you do not plan to utilize. Any proposed changes must be pre-approved by the M/WBE Office, be based on legitimate business-related reasons, and still meet the M/WBE participation goals per the City's contract.
10. A bidder who is a certified M/WBE may count toward the goal the portion of work or services on a City contract that is actually performed by the M/WBE, including: the cost of supplies/materials purchased or equipment leased for contract work, fees for bona fide services such as professional or technical services, or for providing bonds or insurance specifically required for the performance of a City contract.
11. If awarded the contract, the MWBE Office **will be reviewing your company's subcontracts, invoices and payment records** to substantiate the completion of work and payment of M/WBEs. If the prime contractor is an M/WBE that is being included in its M/WBE goal, the prime contractor must maintain records **that will be inspected** to prove the portion of work performed, cost of work, and payments to the prime company.
12. Most bids for goods and materials do not have specific MWBE goals established for the contract. If no goals are include in the scope of work or General Specifications, you are not required to submit MWBE participation but ~~encouraged~~ do so when the opportunity is available. The City maintains this information for statistical purposes only and it is not reflected in the award decision.