



Hall County Government  
FINANCIAL SERVICES

INVITATION TO BID  
IFB #029- 44

For the provision of services to:  
**FURNISH AND INSTALL ONE  
REPLACEMENT GENERATOR  
At Hall County Fire Station #9**

POST OFFICE DRAWER 1435  
GAINESVILLE, GA 30503

t: 770.535.8270 | f: 770.531.6711

DIRECTOR  
Wesley Geddings

Hall County, Georgia, (Herein "County") Fire Rescue, is seeking qualified contractors to Furnish And Install One (1) Replacement Generator replace existing generator and furnish and install one (1) new generator at Hall County Fire Station #9 located at 5040 Poplar Springs Road Gainesville, GA. (herein "Services").

This is a turnkey project to provide all materials, equipment, labor, and supervision. The project includes removing and disposing of the existing generator. The County seeks to award one (1) contractor for the project.

**Date IFB Issued:** Monday, 11/07/2023

**Mandatory Pre-Bid On-Site Visit Dates:**

Bidders are required to attend one Pre-Bid meeting on either of these two dates;

Monday, November 27, 2023, 9:00am or

Wednesday, November 29, 2023 9:00am

Located at Fire Station #9 located at 5040 Poplar Springs Road Gainesville, GA.

**Bid Due Date:** Thursday, 12/07/2023, 2:00pm

**Project Manager:** Bradley Martin, Division Chief of Support Services, Hall County Fire Rescue. Phone (678) 343-0636, bmartin@hallcounty.org

**Bidding Process:** The County is now accepting sealed bids for the provision of services to Replace Existing Generator and Furnish and Install one (1) new Standby Generator at Fire Station #9, in the County's Purchasing Division, located on the fourth (4<sup>th</sup>) floor at the Hall County Government Center, 2875 Browns Bridge Road, Gainesville, GA 30504, until 2:00 p.m., EST, Thursday, December 7, 2023.

The County will make any extension of the bidding period by a formal written addendum and publicly posted. Bidders must submit two (2) copies of the bid along with all mandatory documents, signed affidavits and Exhibit C - Mandatory Cost Proposal in hardcopy and also include on one (1) USB Flash Drive with all documents. Emailed bids are not acceptable.

**Proposal Documents:** Bidders may download bid submittal documents via the County's Website at <https://www.hallcounty.org/Bids.aspx> , then choose *REPLACE STANDBY GENERATOR*, and download the bid packet.

**General Qualifications:** Bidders must be in the regular business of providing similar services, be licensed, insured, and bonded to do so in the State of Georgia. A Bid bond is not required but a Letter of Bondability, in the case of an award, is required.

**Bid Retention:** Bidders may not withdraw their bid after the bid opening. Bids must be valid for one-hundred and twenty calendar days (120). The County reserves the right to retain all bids submitted and use any idea(s) in a bid regardless of award. The County shall have the right to waive any informality or irregularity of immaterial deviation in any bid received. All forms and documents entitled 'Mandatory' must be completed and returned with the bid. Please sign the sample contract.

**Award Process:** The County reserves the option to reject any or all bids, in whole or part, or to select any bidder, without liability on part of the County to the Bidder to complete the described Work. The County will award the project to one (1) company to perform all work to the lowest cost, responsible and responsive bidder. The Bidder expressly understands that the County may reject bids for any reason

## **1.0 SCOPE OF WORK**

Remove and dispose of existing natural gas Kohler generator and transfer switch and install new 35 KW Diesel Generator with matching (same Mfg.) 200 amp Transfer Switch. Cap existing Natural gas line as close to the ground as possible. Modify or replace the concrete pad to accommodate the new generator.

### **1.1 SPECIFICATIONS**

- A. The Emergency Power System must provide an alternate AC power source for load, in the event there is an interruption of normal utility power. When required, the unit must automatically transfer the load from the normal power source to the standby emergency generator. Upon return of normal power, the load shall be automatically transferred back to the normal power source and the emergency generator shall automatically shut off, after a cool-down period.
- B. The extent of Emergency Power Systems (EPS) work is indicated by the requirements of this Section. Provide a complete automatically operated electric generating set of the size, type, and operating characteristics described, completely installed, tested, and operative. All equipment, labor, and materials necessary to accomplish this must be included, and the coordination of all required equipment and materials shall be the responsibility of one manufacturer, who has an approved experience record in furnishing similar equipment.

### **1.2 QUALITY ASSURANCE:**

- A. Manufacturers: The following manufacturers are acceptable provided they meet all requirements of the specifications: Generac or equal in fit, form and function.
- B. Geographic Location: The installation/service center must be located within 100 miles of Hall County.
- C. Requirements:

1. The installation/service center shall be factory-authorized and must be certified, in writing, by the manufacturer, as being responsible for installation and warranty work and must be capable of performing work on the engine, generator, battery charger, fuel system, automatic transfer switch, and all accessories that make up the complete emergency power system.
2. The installation/service center shall provide on-site service within 4 hours of receipt of Service request.
3. The installation/service center shall maintain adequate levels of repair parts inventory.

**1.3 MANUFACTURER TESTING:**

- A. Design prototype testing - Must be performed on similar models of the unit furnished on this project.
- B. Final production testing of the engine/generator and automatic transfer switch -
- C. Field testing, by the manufacturer's local representative.

**1.4 Environmental Protection Agency emissions regulation compliance.** The generator assembly shall comply with EPA Tier regulations with respect to the specified size.

**1.5 SERVICE / MAINTENANCE AGREEMENT:**

- A. The engine/generator supplier shall provide a service/maintenance contract covering a minimum of one year of operation, from the date of Substantial Completion. There shall be no deductible costs, or other costs, to the Owner for these services. All costs shall be included in the bid for this project. The agreement shall be made in the name of the Owner. The service/maintenance agreement applies to the following items of equipment:
  1. Engine-Generator Set.
  2. Automatic Transfer Switch.
- B. The Maintenance agreement shall include the following and also shall include services per the equipment manufacturer's applicable instruction manual:
  1. Lube, oil, and filter change
  2. Fuel filter change
  3. Engine tune-up with parts
  4. Service/replace air cleaner
  5. Check the coolant level
  6. Test anti-freeze and adj.
  7. Inspect cooling system hoses
  8. Service/replace belts as required
  9. Check engine heater operation
  10. Check the generator set for fuel, oil, and coolant leaks
  11. Check air intakes and outlets
  12. Drain exhaust line
  13. Inspect silencer
  14. Check battery charger operation and charge rate
  15. Check battery electrolyte levels and specific gravity
  16. Emergency system operation with load applied for one one-hour period
  17. Frequency check/governor adj.
  18. Check the transfer switch and accessory operation

- 19. Check engine alternator charge rate
- 20. Check engine-generator gauge and indicator operation
- 21. Check generator set controller operation including shutdown functions and emergency stop
- 22. Check generator output voltage and adjust as necessary
- C. Maintenance shall be performed at intervals stated in the equipment manufacturer's applicable instruction manuals except that the minimum service visits shall be four per year.
- D. Maintenance shall be performed during the owner's normal working hours. Arrangements will be made with the owner within 24 hours prior to each service call in order to secure access to the equipment.
- E. The servicing agent will supply labor, supplies, parts, and test equipment, as necessary to perform the service and preventative maintenance, at no additional cost.
- F. The service agreement shall include labor, supplies, and replacement parts to restore the system to operating condition, whether due to normal wear and tear or defects in workmanship or materials.
- 1. Response to service calls shall be made within 4 hours.
- H. The servicing agent shall maintain a complete service history and necessary drawings and service procedure data for reference in the service of the equipment. The agreement does not include any expense to repair damage caused by abuse, accident, theft, acts of a third person, forces of nature, alteration of equipment, or improper operation. The servicing agent shall maintain a representative stock of replacement parts for the complete emergency system and a competent factory-trained service organization.
- I. After each inspection, the owner will be furnished a written report detailing any conditions found and advising further service required, if any, to ensure the operating dependability of the equipment under contract.

#### **1.6 COMPREHENSIVE WARRANTY:**

The standby electric generating system components, complete genset, and instrumentation panel shall be warranted by the manufacturer against defective materials and factory workmanship for a period of five (5) years. Such defective parts shall be repaired or replaced at the manufacturer's option, free of charge for parts, labor, and travel. The warranty period must commence when the standby power system is first placed into service. Multiple warranties for individual components (engine, alternator, controls, etc.) will not be acceptable. Satisfactory warranty documents must be provided. Also, in the judgment of the specifying authority, the manufacturer supplying the warranty for the complete system must have the necessary financial strength and technical expertise with all components supplied to provide adequate warranty support.

#### **1.7 PRODUCTS**

- A. The system shall have the following characteristics:
  - 1. 35 kW, for Continuous Standby Service; based on use in outdoor housing - geographic location - Gainesville, GA, USA.

NOTE: amps output and breaker amps shall not exceed the ampacity of the existing wire that feeds from the existing generator to the new transfer switch in the bay.

- B. 3-phase, 4W, 208/120 Volts.
- C. Provide monitoring and controls necessary to achieve the following sequence of

- operation:
- D. Transfer the emergency system load within the 10-second interval required by NFPA 110.
  - E. After the emergency load has been stabilized, transfer the optional standby load. Time delay shall be field selectable, 1-5 minutes. Set for 1 minute.
  - F. The isochronous governor must be capable of +.25% steady-state frequency regulation.
  - G. Air Cleaner: Dry element with restriction indicator.
  - H. Lube Oil Capacity: 12 US Quarts, API CD 15W-40
  - I. Lube Oil Filter: Single spin-on, full flow.
  - J. Positive displacement, full-pressure lubrication oil pump, cartridge oil filters, dipstick and oil drain.
  - K. Cooling system: High ambient 122 deg F unit mounted radiator, blower fan, water pump and thermostat.
1. Salient-pole, brushless, 12 lead reconnectable type; self-ventilated, drip-proof housing; amortisseur rotor windings and skewed for smooth voltage waveform. NEMA Class H insulation with fungus-resistant epoxy varnish. Brushless excitation system controlled by solid-state, anti-tracking voltage regulator capable of maintaining +/- 2% for any constant load from 0 to 100% of rating. Provide individual adjustments for voltage range, stability, and volts/hertz operations.
  2. Voltage dip not to exceed 20% with one-second recovery within 2% of rated voltage, for one-step loads 0 to 90% of the rating.
  3. Shall sustain at least 250% rated current for a minimum of 10 seconds, based on a 3-phase symmetrical fault.
  4. Integral thermal-magnetic circuit breaker on output, coordinated not to trip under the conditions described above.

## **1.8 CONTROLLER:**

- A. Set-mounted, microprocessor-based, with vibration isolation. Modular construction to allow field replacement and for field testing without starting the generator. Controller shall include:
  1. Fused DC circuit
  2. Complete two-wire start/stop control which shall operate on closure of remote contact device(s).
  3. Speed-sensing and a second independent starter motor disengagement system shall protect against starter engagement with a moving flywheel. Battery charging alternator voltage will not be acceptable for this purpose.
  4. The starting system shall be designed for restarting in the event of a false engine start, by permitting the engine to completely stop and then re-engage the starter.
  5. Cranking cyler with 15-second ON and OFF cranking periods. Crank control shall provide at least two cranking periods. Each cranking attempt shall be separated by appropriate rest periods. A sensing device shall automatically disconnect the starting circuit when the engine has started. If the engine has not started at the completion of the starting program, the over-cranking signal shall so indicated. The engine starting controls shall be locked out and no further starting controls shall be locked out and no further starting attempts shall take place until the over cranking device has been manually reset. A selector switch shall be incorporated into the automatic engine start and stop controls. It shall

- include an "off" position that prevents manual or automatic starting of the engine; a "Manual" or "hand-crank" position that permits the engine to be started manually by the pushbutton on the control cabinet and an "automatic" position that readies the system for automatic start or stop on demand of the control system.
6. Over crank protection is designed to open the cranking circuit after 75 seconds if the engine fails to start.
  7. Circuitry to shut down the engine when signal for high coolant temperature, low oil pressure or over speed are received.
  8. Engine cool down timer factory set 5 minutes to permit unloaded running of the standby set after the transfer of the load to normal.
  9. Three-position (Automatic-OFF-TEST) selector switch. In the TEST position, the engine shall start and run regardless of the position of the remote starting contacts. In the Automatic position, the engine shall start when contact in the remote control circuit closes and stop 5 minutes after this contact opens. In the OFF position, the engine shall not start even though the remote start contacts close. This position shall also provide for immediate shutdown in case of an emergency. The rest of any fault shall also be accomplished by putting the switch in the OFF position.
  10. Indicating lights to signal:
    - a. Auxiliary Pre-alarm (Yellow)
    - b. Auxiliary Safety Shutdown (Red)
    - c. Switch "OFF" (Flashing Red)
    - d. Over crank (Red)
    - e. Emergency Stop (Red)
    - f. High Water Temperature (Red)
    - g. Over speed (Red)
    - h. Low Oil Pressure (Red)
    - i. Battery Charger Fault (Red)
    - j. Low Battery Voltage (Red)
    - k. Low Fuel (Red)
    - l. System Ready (Green)
    - m. Anti-High Water Temperature (Yellow)
    - n. Anti-Low Oil Pressure (Yellow)
    - o. Low Coolant Temperature (Red)
    - p. Test button for indicating lights.
    - q. Alarm Horn with silencer switch per NFPA 110.
    - r. Terminals shall be provided for each signal in 8.10 above, plus additional terminals for common fault and common pre-alarm.

### **1.9 INSTRUMENT PANEL:**

The instrument panel shall include:

1. Dual range voltmeter 3-1/2 inch, 2% accuracy.
2. Dual range ammeter phase selector switch.
3. Voltmeter-ammeter phase selector switch.
4. Lights to indicate high or low meter scale.
5. Direct reading pointer-type frequency meter 3-1/2 inch, .5% accuracy, 45 to 65 Hz scale.
6. Panel illuminating lights.
7. Battery charging voltmeter.
8. Coolant temperature gauge.
9. Oil pressure gauge.

10. Running time meter.
11. Voltage adjust rheostat.

#### **1.10 MOUNTING BASE:**

- A. The engine generator shall be skid-mounted on two, iron "I" or "C" type channels. The design shall provide vibration isolation between the genset and the mounting base.
- B. The frame design shall not inhibit easy access to the oil pan after the genset has been installed. Installations which require the use of a pump to drain the oil are not acceptable.

#### **1.11 ACCESSORIES:**

- A. The following accessories shall be installed:
  1. Block Heater, 120 Volt AC. Thermostatically controlled and sized to maintain engine coolant at 90°F (32°C) to meet the start-up requirements of NFPA 110, Level 1.
  2. Generator strip heater, 120 volts, single phase for high humidity applications.
  3. Over voltage protection will shut down the unit after one second of 15% or more overvoltage. Note: Sensitive equipment may suffer damage in less than one second of an overvoltage condition. On-line equipment requiring faster shutdown should have its own overvoltage protection.
  4. Weather housing, constructed of rugged steel, cleaned, phosphated, and electrocoat painted inside and out with rust inhibiting primer and exterior coat of the manufacturer's standard color. Provide hinged, double doors on each side to give easy access to the genset, and a rear door to allow access to the control panel. All door handles shall be key-lock type. Skid and floor design shall include a removable panel below the engine oil pan. All shelters shall come ready for job installation. Top-mounted exhaust silencer with rain shield over the exhaust opening. Note: A 120-volt battery box heater shall be included.
  5. Battery rack, battery cables, 12-volt batteries capable of delivering the required minimum cold-cranking amps are required at 0°F.
  6. 10-Ampere automatic float and equalize battery charger with +/- 1% constant voltage regulation from no load to full load over +/- 10% AC input line variation, current limited during engine cranking and short circuit conditions, temperature compensated for ambients from -40°C to +60°C, 5% accurate voltmeter and ammeter, fused, reverse polarity and transient protection. Provide alarm circuit board to meet the requirements of NFPA 110 for low battery voltage, high battery voltage, and battery charger malfunction.
  7. Gas-proof, seamless, stainless steel, flexible exhaust connection, and engine exhaust silencer rated for critical application. Exhaust noise shall be limited to 85 dBA as measured at 10 feet in a free-field environment.
  8. Provide and locate an annunciator adjacent to the fire alarm control panel. Provide all wiring between the remote annunciator and generator set if existing wiring is not usable.

#### **1.12 AUTOMATIC TRANSFER SWITCH:**

- A. The automatic transfer switch shall consist of a power transfer module and a control module, interconnected to provide complete automatic operation. Enclosure type shall be NEMA 1. The automatic transfer switch shall be mechanically held and electrically operated by a single solenoid mechanism energized from the source to which the load is to be transferred. The switch shall be rated for continuous duty and be inherently double throw. The switch shall be an open transition (break before make) and be mechanically interlocked to ensure only one

of two possible positions - normal or emergency. The automatic transfer switch shall be suitable for use with and supplied by the manufacturer of the standby generator to be furnished for this project. The switch shall be 4-pole, rated for use on a 208Y/120V, 3-phase, 200 amp 4-wire system.

- B. Automatic transfer switches utilizing components of molded-case circuit breakers, contactors, or parts thereof which have not been intended for continuous duty or repetitive load transfer switching is not acceptable.
- C. All main contacts shall be of silver composition. The operating transfer time in either directions shall not exceed one-sixth (1/6) of a second.
- D. The control module shall be supplied with a protective cover and be mounted separately from the transfer switch for ease of maintenance. The interconnecting wiring harness shall include a disconnect plug to disconnect all wires including both sources of control power for routine maintenance.
- E. Sensing and control logic shall be solid-state and mounted on plug-in printed circuit boards. Printed circuit boards shall be keyed to prevent incorrect installation. Interfacing relays shall be industrial control grade plug-in type with dust covers.
- F. This group contains all of the following:
  - 1. Voltage and Frequency Sensing
  - 2. Time Delays
  - 3. Engine Control Contacts
  - 4. Test Switch
  - 5. Indicators
- G. Provide the following accessories:
  - 1. Engine generator exercising timer with a toggle switch to select load, no-load operation. Adjustable in 15-minute increments. Factory set at 20 minutes minimum each week unless otherwise specified.
  - 2. Overlapping neutral transfer contact.
- H. Inspection of all contacts (movable and stationary) shall be possible from the front of the switch without disassembly of operating linkages and without disconnections of power conductors. A manual operating handle shall be provided for maintenance purposes.
- I. The automatic transfer switch shall conform to the requirements of NEMA Standard ICS2-447 and Underwriters Laboratories UL 1008.
- J. The complete automatic transfer switch shall be tested to ensure proper operation of the individual components and correct overall sequence of operation and to ensure that the operating transfer time, voltage, frequency, and time delay settings are in compliance with the specification requirements. Submittals for approval shall include wiring diagrams, dimensional data, and a complete description of the operation.
- K. The transfer switch shall be furnished with an operator's manual providing installation and operating instructions.

### **1.13 FUEL FACILITIES:**

- A. Sub-base fuel storage tank shall be supplied. The tank shall be Double Wall design with a minimum of 24 hours of operation at full load capacity. The tank shall be made of corrosion-resistant steel. Provide an automatic leak detection system in the space between the walls, supply vents, lockable fill, level gauge, and fuel lines as required. The fuel Tank shall be UL-listed and labeled.
- B. Hall County will provide/fill the generator with diesel
- C. Provide factory representative to conduct startup and testing. Testing shall comply with the requirements of NFPA 110, paragraph 5-13, "Installation Acceptance". Provide a resistive load



- bank to conduct the tests.
- D. Upon completion of testing, the factory representative shall provide 4-hours of on-site training of the Owner's designated personnel.
  - E. All wiring and interconnections shall be in accordance with commercial electrical standards. Installation drawings and complete wiring diagrams shall be furnished to the Owner.

Mandatory on-site meeting will be held by appointment only with the County Project Manager. Only signed attendees of this meeting will be allowed to bid!

**Alternate/add # 1:** Offer additional cost for a higher KW generator IF existing wire from the generator to transfer switch will accommodate. Do not exceed the capacity of the new 200 amp transfer switch

**Alternate/add # 2** to provide the cost for additional Preventive Maintenance (as described for year one) for years 2 through 5.

Give estimated lead times for completion after the job is awarded.

## 2.0 SUBMISSION OF BIDS

- 2.01 Complete and include all the Mandatory Exhibit Documents shown below in 2.03. Failure to include any of the mandatory documents listed may result in disqualification. All responses must be in writing.
- 2.02 Bidders must submit their signed response in a sealed envelope clearly marked with **"INVITATION FOR BID #029-44"** on the outside and on a USB drive. The submittal must have an original signature on the bid. Faxed or emailed bids are not accepted.
- 2.03 Follow these instructions carefully. Complete and return the following included in your bid envelope. Do not email your bid response.

- Exhibit A - Mandatory Bid Response Sheet
- Exhibit B – N/A
- Exhibit C - Mandatory Cost Proposal Worksheet
- Exhibit D - Mandatory Completed W-9 Form
- Exhibit E – Mandatory E-Verify Affidavit
- Exhibit F - Mandatory Ethics Affidavit
- Copy of Business License
- Letter of Bondability
- Copy of Certificate of Insurance

- 2.04 Bids openings are open to the public and bidders may attend but are not required to do so. All bids, supporting materials and correspondence relating to this IFB become property of Hall County when received. Bidders can submit bids to the following address by the deadline date and time:

- 2.05 Hand Delivery/FedEx/UPS/USPS/Courier:

- Andrew Youngblood  
Issuing Officer  
Hall County Government Center

Purchasing Division - 4th Floor,  
2875 Browns Bridge Road,  
Gainesville, Georgia 30504

2.06 Mailing Address:

Andrew Youngblood  
Issuing Officer  
Purchasing Division - 4th Floor  
P.O. Drawer 1435  
Gainesville, GA. 30503

**3.0 BID PREPARATION**

Bidder bears all responsibility for expenses incurred in responding to this IFB such expenses to be borne exclusively by the proposer.

If you desire to submit a "NO BID", response then please indicate by checking here:

\_\_\_\_\_ No Bid. List reason for no bid \_\_\_\_\_