

Lori Hendricks
Wagoner County Clerk



307 E. Cherokee St.
Wagoner, OK 74467
918.485.7716
Fax 918.485.7718

Invitation to Bid

The Board of County Commissioners, Wagoner County, Oklahoma is seeking sealed bids for two (2) single phase Uninterruptible Power systems (UPS) to be used in 2 Communication Shelters. The system shall include all components required to deliver reliable, high quality, regenerated uninterruptible power for the intended load. The sites are located at: (1) 27652 E 101st, Broken Arrow, OK 74429 and (2) 37001 R 600 Rd, Locust Grove, OK 74352

Bid #1

Date Published: August 9, 2012 (Wagoner Tribune)
Bidding Period Closing Date and Hour: August 24, 2012 @ 4:00 PM
Sealed Bid Opening Date and Hour: August 27, 2012
Requesting Authority: Wagoner County E911

Bid submissions are to be: Addressed to:
Wagoner County Purchasing Agent
P O Box 156
Wagoner, OK 74477

Delivered to:
Wagoner County Purchasing Agent
307 E Cherokee
Wagoner, OK 74467

Please review the attached Terms and Conditions pertaining to the submission of this bid.

Please pay particular attention to Item 1 of the Terms and Conditions. This item specifies how the bid envelopes are to be identified to prevent inadvertent or premature opening of sealed bids. Your compliance will ensure consideration of your bid by the awarding body. Late bids will not be considered.

Included in this packet is a Non-Collusion Affidavit which must be signed and submitted as part of the bid.

This packet contains:

1. Invitation to Bid
2. Terms and Conditions for Bidding
3. Affidavit of Non-Collusion
4. Specifications
5. Bid Form
6. Insurance Requirements

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TERMS AND CONDITIONS

THESE ITEMS APPLY TO AND BECOME A PART OF THE BID
NO EXCEPTIONS TO THESE TERMS AND CONDITIONS WILL BE CONSIDERED

1. Bids must be submitted on the included form only. Each bid shall be placed in a separate envelope. Be sure the envelope is completely and properly identified and sealed, showing the bid name and number in the lower left hand corner.
2. All bids shall be entered on the Bid Form enclosed or a copy thereof. Bids are to be typewritten or in ink. No bidder may withdraw his proposal for a period of thirty (30) days after the date and hour set for the opening of bids.
3. The bidder shall attach the manufacturer's name of the equipment or material to be furnished, type, model numbers, manufacturer's descriptive bulletins and specifications. All guarantees and warranties should be clearly stated. This data shall be in sufficient detail to describe accurately the equipment or material to be furnished. Manufacturer's specifications, in respect to the successful bidder, shall be considered as part of the contract with Wagoner County.
4. Any exceptions or deviations from written specifications shall be identified in writing and attached to the bid form.
5. The enclosed Non-Collusion Agreement MUST be returned with the bid.
6. Wagoner County reserves the right to reject any and all bids and to waive any technicalities in the bidding.
7. Direct purchase of certain items of equipment or material by Wagoner County is exempt from Federal Excise Tax and Oklahoma Sales Tax. In such cases, the bidder shall quote prices which do not include Federal Excise Tax and Oklahoma Sales Tax.
8. Bid must show number of days required for delivery under normal conditions. Contractor must keep the County advised at all times of the status of the order. For any exception to the delivery date as specified on this order, vendor shall give prior notification and obtain written approval from the Purchasing Agent. Default in promised delivery date, or failure to meet specifications, authorizes the County to purchase supplies elsewhere and charge the full increase of cost and handling to defaulting contractor.
9. Bidder agrees to defend and save Wagoner County from and against all demands, claims, costs expense, damage and judgments based upon infringement of any patent to goods specified in this order or the ordinary use or operation of such goods

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by the County or use or operation of such goods in accordance with the bidders' direction.

10. Successful bidder will be required to furnish their own Workman's Compensation Insurance and General Liability as specified in the bid packet.
11. Successful bidder is responsible for obtaining all required permits from Wagoner Metro Area Planning Commission located at 306 E Cherokee, Wagoner, OK 74467. Phone: 918-485-8123

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AFFIDAVIT OF NON-COLLUSION

I, the undersigned, of lawful age, being first duly sworn on oath say that he (she) is the agent authorized by the bidder to submit the above bid. Affiant further states that the bidder has not been a party to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding; or with any state official or employee as to quantity; quality or price in the prospective contract or any other terms of said prospective contract; or in any discussion between bidders and any state official concerning exchange of money or other thing of value for special consideration in the letting of a contract; that the bidder/contractor has not paid, given or donated or agreed to pay, give or donate to any officer or employee of the State of Oklahoma (or other entity) any money or other thing of value, either directly or indirectly in the procuring of the award of a contract pursuant to this bid.

(Typed/Printed)

Name: _____ Title: _____

Signature: _____

Firm: _____ Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

Subscribed and sworn before me this _____ day of _____, 200_____.

Signature: Notary Public (Clerk or Judge)

My commission expires _____

Office Seal

Uninterruptible Power Systems

Section I

1.1 General

This specification describes the electrical and mechanical characteristics and requirements for a single phase uninterruptible power system (UPS). The system as specified herein shall include all the components required to deliver reliable, high quality, re-generated uninterruptible power for the intended load. The system shall be a line interactive UPS incorporating an IGBT based microprocessor controlled PWM inverter, high speed transfer SCR devices, constant voltage regulating transformer, battery charger, an energy storage battery platform, monitoring display panel, and all related hardware components and software to facilitate a functional centralized system. A self-diagnostic monitoring system shall continuously advise of system status and battery condition. This bid document is for 2(two) UPS units for 2(two) locations.

1.2 Standards

1.2.1 Systems shall be designed in accordance with applicable portions of the following codes and standards:

American National Standards Institute (ANSI C57.110).
Institute of Electrical and Electronic Engineers (IEEE 519-1992) (C62.41-1991).
National Electrical Manufacturers Association (NEMA PE-1).
National Electric Code (NEC).
National Fire Protection Association (NFPA 70).
Underwriters Laboratories (U.L.1778).
Federal Communications Commission (FCC Part 15, Sec. J, Class A).

1.2.2 Listings: Listed to UL 1778 and cUL C22.2, No. 107.1-M01.

1.3 Submittals

- 1.3.1 Include submittal documentation for the installation of the system, including wiring diagrams and cabinet outlines showing dimensions, weights, BTUs, input/output current, input/output connection locations and required clearances.
- 1.3.2 The manufacturer shall be ISO9001 "Quality Assurance Certified".
- 1.3.3 The supplier shall be a United States based manufacturer of Uninterruptible Power Systems with 15 years' experience or greater in design and fabrication of UPS equipment.
- 1.3.4 Include factory test results and /or specifications to validate compliance with the requirements. The manufacturer must include battery test documentation to validate the specified minimum emergency reserve with full rated load.
- 1.3.5 Furnish (6) equipment submittal copies. Submittals are to be specific for the equipment furnished and must include as-built information.

Section II

2.1 Manufacturers

The equipment specified shall be the HV Series uninterruptible power system, manufactured by Controlled Power Company or approved equal.

2.2 Manufactured Units

- 2.2.1 The system shall operate in accordance with requirements as specified herein to support any combination of resistive, leading or lagging power factor loads, linear, non-linear and power factor corrected loads. The system's inherent operating characteristics must limit rectifier/charger induced harmonics without the use of harmonic filters, thus allowing effective generator compatibility without excessive over-sizing of the generator. Systems shall also be programmable to compensate for site specific generator / UPS synchronization requirements.
- 2.2.2 Normal Operation: The load shall be supplied with regenerated, filtered and regulated power derived from the output regulating transformer. When utility AC or generator AC power is present, the battery charger shall maintain a ripple free float charge on the batteries.
- 2.2.3 Emergency Operation: Upon the failure or unacceptable deviation of utility AC power, battery power shall be converted by the PWM inverter and filtered through the constant voltage regulating output transformer. There shall be no break or interruption of power to the load upon failure or restoration of the utility AC power. Any transfer time resulting in a break or loss of power is unacceptable.
- 2.2.4 Automatic Restart: In the case of a commercial power outage that exceeds the battery run time required, the output of the inverter shall shut off, but automatically restarts once commercial AC power returns. Recharging of the batteries shall then commence immediately.
- 2.2.5 Manual Maintenance Bypass: The system shall include an integral make before break service maintenance bypass switch. The service maintenance bypass switch incorporates make before break functionality, allowing make before break transitions to and from bypass mode without power interruption or disturbance.
- 2.2.6 UPS System Output Rating: 9.0 KVA
- 2.2.7 Battery Time Reserve Capacity: 12 minutes at full rated KVA output.
- 2.2.8 Reliability: MTBF 100,000 hours. MTTR 1 hour.

Section III

3.1 Input Specifications

- 3.1.1 Input Voltage: 208, 240, 277, 347 and 600 VAC.
- 3.1.2 Input Voltage Operating Range: +10% to -15% at full load without battery usage.
- 3.1.3 Frequency Range: 57.5 Hz to 62.5 Hz.
- 3.1.4 Power Factor: Self-correcting to >0.95 (approaching unity).
- 3.1.5 Input Harmonics: < 10% THD (total harmonic distortion) with linear/nonlinear loading.
- 3.1.6 Transient / Spike Attenuation: 3000:1.

3.2 Output Specifications

- 3.2.1 Output Voltage: 208, 240/120, 277, 347 and 600 VAC.
- 3.2.2 Sine Wave Voltage: Maximum 5% harmonic distortion under linear load.
- 3.2.3 Crest Factor: 3.5 : 1.
- 3.2.4 K Factor: 30 or better.
- 3.2.5 Harmonic Attenuation: Reflected load generated harmonics shall be attenuated 23dB at the input.
- 3.2.6 Line Regulation: Typically better than +/-3%.
- 3.2.7 Load Regulation: Typically better than +/-3%.

3.3 Battery Specifications

- 3.3.1 Battery time: Based on full KVA load.
- 3.3.2 Battery Type: Sealed, maintenance free.
- 3.3.3 Charger: 5 Amps, two stage.
- 3.3.4 Recharge Time: Typically 10 times discharge time to full charge.
- 3.3.5 Bus Voltage: 96 VDC, float 2.27 VPC, final 1.75 VPC.
- 3.3.6 Projected Life: 5 years' service, 10 year design life..

3.4 Performance Specifications

- 3.4.1 Overload Capability: 125% for ten minutes.
- 3.4.2 Surge Capability: 150% of rated output without need of static bypass.
- 3.4.3 Frequency Stability: ± 0.2 Hz.
- 3.4.4 Isolation: NEC article 250.20b, include isolation transformer to validate this requirement for a separately derived power source.
- 3.4.5 Inner Winding Capacitance: 0.01 pF (primary to secondary coupling).
- 3.4.6 Common Mode Noise Attenuation: 120 dB (10^6 : 1 ground noise attenuation).
- 3.4.7 Transverse Mode Noise Attenuation: 70 dB (3160 : 1 line noise attenuation).
- 3.4.8 Reactive Power Factor Correction: Input power factor > 0.95 self correcting.
- 3.4.9 Efficiency: Not less than 91% under full rated load.
- 3.4.10 Reliability: The constant voltage regulating transformer shall have a reliability of 200,000 hours MTBF and the electronic system shall have a reliability of 100,000 hours MTBF.

3.5 Environmental Specifications

- 3.5.1 Operating Temperature: 0°C (32°F) to 40°C (105° F).
- 3.5.2 Storage Temperature: -20°C to 50°C.
- 3.5.3 Relative Humidity: 95% non-condensed.
- 3.5.4 Elevation: 5,000 feet, (1500 meters) above sea level without de-rating.

3.5.5 Ratings and Cabinet Sizes:

<u>KVA / KW Rating</u>	<u>Dimensions W x D x H</u>
9000 / 7000	21.5" x 32" x 44"

- 3.5.6 Audible Sound Level: Not greater than 52 dBA.
- 3.5.7 Enclosure: NEMA 1 for indoor use.

Section IV

4.1 Display Monitor and Diagnostics

- 4.1.1 Display - Backlit, 40 character alphanumeric LCD display for sharp visual resolution of data and titles. Displays data as selected by user keypad.
- 4.1.2 Keypad – Sealed, membrane keypad for user selection of monitored electrical operating parameters, monitored alarm conditions, UPS system control settings and log functions.
- 4.1.3 Alarm Panel – Automatic indication of general system status including UPS on, on battery and bypass status.
- 4.1.4 Measurements – AC input voltage, AC output voltage line to neutral, AC output voltage line to line, AC output current line one, AC output current line two, percent (%) load, current crest factor line one, current crest factor line two, DC charging voltage, DC charging current, battery bus voltage, output frequency, battery backup time remaining, load KW, and load power factor.
- 4.1.5 Accuracy – True RMS measurements with 1% accuracy.
- 4.1.6 Alarm Messages – Low battery voltage warning, DC battery charger failure, over temperature warning, and output overload warning.

4.2 Communications Interface

- 4.2.1 Status / Alarm relay interface normally open contacts shall be provided for optional remote annunciator panel or automatic message dialer. Include contacts for UPS on, utility AC power failure (system using battery power), low battery warning, system in bypass mode, and general alarm.
- 4.2.2 Status / Alarm relay contact ratings: 24 VAC and/or 24 VDC, 500mA.
- 4.2.3 Power supply included for + 5 VDC, 5mA with fully isolated logic ground.

Section V

5.1 Accessories

- 5.1.1 Include external, wall mounted, make before break maintenance bypass switch.
- 5.1.2 Include SNMP / TCP/IP Adapter.

Section VI

6.1 Warranty

- 6.1.1 The manufacturer shall guarantee all systems to be free from material defects and workmanship for a period of 1 year following shipment from the factory.
- 6.1.2 Battery warranty shall be full replacement within the first year. A 15 year pro-rated warranty shall be made available with applicable maintenance contract.

Section VII

7.1 Startup

- 7.1.1 Startup must be performed by a factory authorized service engineer.

Section VIII

8.1 Shipping

- 8.1.1 Successful bidder will hold UPS until a shipping/install date is provided to them by Wagoner County.

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BID FORM

INVITATION FOR SEALED BIDS FOR TWO
UNINTERRUPTIBLE POWER SYSTEMS (UPS)

DATE AND TIME OF OPENING: _____

Bidder agrees to furnish Wagoner County with TWO (2) UNINTERRUPTIBLE POWER SYSTEMS (UPS) PER ATTACHED SPECIFICATIONS.

PRICE FOR YONKERS UNIT: \$ _____

PRICE FOR COWETA UNIT: \$ _____

The undersigned acknowledges receipt of the following Addenda. (Give number and date of each):

Delivery will be available in not more than _____ days after receipt of order.

I have examined the terms and specifications and instructions to bidders herein, and agree, provided I am awarded a contract, to provide the above described items for the sum shown in accordance with the terms and specifications stated herein. All deviations are in writing and attached hereto.

MUST BE SIGNED BY AUTHORIZED AGENT TO BE VALID

SIGNATURE: _____

PRINTED NAME: _____

TITLE: _____ FIRM NAME: _____

ADDRESS: _____

PHONE NO: _____ DATE: _____

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INSURANCE REQUIREMENTS

The CONTRACTOR (and any subcontractors) shall carry and keep in force during this Agreement policies of insurance in minimum amount as set forth below, as required in Article 21 of the General Conditions, and/or as required by the laws of the State of Oklahoma. The Contractor shall also furnish an Owner's Policy in the same amounts with Wagoner County as the named assured, issued by the same insurance company as the Contractor's Liability Coverage.

Personal Injury, Each Person	\$1,000,000.00
Personal Injury, Each Accident	\$1,000,000.00
Property Damage, Each Occurrence	\$1,000,000.00
Property Damage, Aggregate	\$1,000,000.00

Employer's Liability and Workers' Compensation in the amounts as required by law.

Automobile and Trucks Owned, Hired and Non-Owned

Personal Injury	\$1,000,000.00
Personal Injury, Each Accident	\$1,000,000.00
Property Damage, Each Accident	\$1,000,000.00

The CONTRACTOR shall furnish certificates of such insurance which shall provide that in the event of any material change or cancellation of said policies, the company will give Wagoner County, OWNER, fifteen (15) days written notice.

Wagoner County shall be named as an Additional Insured on CONTRACTOR'S Insurance Policy.

Statements such as "will endeavor" and "but failure to notify" owner shall impose no obligation or liability of any land upon the company" shall not be allowed.

Special coverage for any blasting operations or use of explosives shall be listed separately on the certificates.

All insurance must be executed by a company licensed to do business in the State of Oklahoma, and must be acceptable to the Board, Wagoner County.