

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

Bidder must complete and return this form for the bid to be considered responsive. A check mark shall be placed in the areas of specification agreement. Variances must be clearly identified and bidder may use a separate sheet if necessary. Failure to comply with any part of the specifications will not remove that bid from consideration but will indicate a variance on which the City alone will determine the importance to the overall performance of the item and suitability for the intended purpose. Specifications are ***minimum specifications***, unless otherwise noted, and bidders shall meet or exceed the specifications. Equipment bid is to be new, unused and of the Manufacturer's latest model. Any omission from the specifications shall not relieve the bidder from the responsibility of furnishing a ***102KW standby generator with automatic transfer switch*** ready for use.

City's Specifications

Bidder's Equipment

Acceptable manufacturers: Caterpillar, Cummins, or Kohler ONLY.

Quantity: 1 – 102KW generator with automatic transfer switch

Make: Please specify

Model: Please specify

The generator set shall be Standby Duty rated for the specified KW rating

The generator set shall be 102 KW STANDBY RATED, with an alternator rated for a Class B 80°C temperature rise or Class F 105°C temperature rise CONTINUOUS. It shall provide 128 KVA and 102 KW when operating at 240 volts, 3Ø 60 Hz, 0.80 power factor STANDBY.

The generator set shall be capable of a 130°C STANDBY rating while operating in an ambient condition of less than or equal to 104°F and a maximum elevation of 1600 feet above sea level.

The standby rating shall be available for the duration of the outage.

The generator output shall be 102KW @ 1800 RPM, 0.8 power factor, 240 V, 3-phase, 60 hertz

Company Name: _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

The generator shall be capable of starting motor loads of 150 kVA inrush with a maximum voltage dip of 20%

Vibration isolators shall be provided between the engine-generator and heavy duty steel base

The generator set shall be sound attenuated to a level suitable for a residential area

Engine:

The engine shall be diesel fueled, four (4) cycle, water-cooled, turbocharged, low BSFC/EPA Tier 3

The engine shall be equipped with the following:

- a. The engine governor shall be an electronic Engine Control Module (ECM) with 24-volt DC Electric Actuator
- b. Steady-state frequency regulation shall be +/- 0.25%
- c. Speed droop shall be adjustable from 0 (isochronous) to 10%, from no load to full rated load
- d. DC electric positive engagement solenoid shift-starting motor
- e. A current limiting battery charger shall be furnished to automatically charge the batteries. The charger shall be dual charge rate with automatic switching to the boost rate when required. The charger shall be mounted on the genset package.
- f. Batteries shall be heavy duty lead acid type

The fuel system shall be integral with the engine. In addition to the standard fuel filters provided by the engine manufacturer, there shall also be installed a primary fuel filter/water separator in the fuel inlet line to the engine. All fuel piping shall be black iron or flexible fuel hose rated for this service. No galvanized piping will be permitted. Flexible fuel lines shall be minimally rated for 300 degrees F and 100 psi.

Company Name: _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

The generator set shall be equipped with a rail-mounted, engine-driven radiator with blower fan and all accessories. The cooling system shall be sized to operate at full load conditions and 120 F° ambient air entering the enclosure. The generator set supplier is responsible for providing a properly sized cooling system based on the enclosure static pressure restriction.

Engine shall be certified as LOW BSFC / EPA TIER 3. The engine must meet applicable EPA non-road mobile regulations and/or the EPA NSPS rule for stationary reciprocating compression ignition engines. Additionally, the engine shall comply with the State Emission regulations at the time of installation/commissioning. Actual engine emissions values must be in compliance with applicable EPA emissions standards per ISO 8178 – D2 Emissions Cycle at specified kW / bHP rating. Utilization of the “Transition Program for Equipment Manufacturers” (also known as “Flex Credits”) to achieve EPA certification is not acceptable.

Engines shall start, achieve rated voltage, and freewheel, and be capable of accepting load within 10 seconds of detected power interruption.

Generator:

The synchronous three phase generator shall be a single bearing, self-ventilated, drip-proof design in accordance with NEMA MG 1 and directly connected to the engine flywheel housing with a flex coupling.

The excitation system shall enable the alternator to sustain 300% (250% for 50Hz) of rated current based on the 125C (Class H) rise rating for ten seconds during a fault condition and shall improve the immunity of the voltage regulator to non-linear distorting loads.

Company Name: _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

The excitation system shall be of brushless construction and be independent of main stator windings (either permanent magnet or auxiliary windings).

The insulation shall meet the NEMA standard (MG1-22.40 and 16.40) for Class H.

The microprocessor based voltage regulator shall be capable of maintaining voltage within +/- 0.25% at any constant load from 0% to 100% of rating.

The generator shall meet performance class G2 of ISO 8528.

Controller:

The generator must meet NFPA-110 Level 1 requirements (1999 version) and must have an integral alarm horn as required by NFPA.

The generator must meet NFPA-99 and NEC must also be accommodated.

The generator set control shall be tested and certified to the following environmental conditions.

- a. -40°C to +70°C operating temperature range
- b. 100% humidity, condensing

The following functionality shall be integral to the control panel.

- a. The control shall include a LCD display with text based alarm/event descriptions.
- b. Audible horn for alarm and shutdown with horn silence switch
- c. Remote start/stop control
- d. Local run/off/auto control integral to system
Microprocessor
- e. Lamp test
- f. Emergency stop push button

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

Control Functional Requirements:

- a. Field programmable time delay for engine start.
Adjustment range, 0-15 minutes in 1 second increments. _____

- b. Field programmable time delay engine cool down.
Adjustment range, 0-99 minutes in 1-minute increments. _____

- c. Output for overcurrent if the generator reaches a user programmable percentage of its kW rating. Load shed must also be enabled if the generator output frequency falls below 59 Hz (60 Hz system) or 49 Hz (50 Hz system). _____

- d. Programmable cyclic cranking that allows up to six crank cycles and up to 45 seconds of crank time per crank cycle. _____

All monitored functions must be viewable on the digital display.

The following generator functions must be monitored:

- a. Generator AC voltages – Line to Line, Line to Neutral, Average, 1.0% accuracy _____
- b. Generator AC currents – Per phase and Average, 1.0% accuracy _____
- c. Generator AC frequency, 1.0 accuracy _____

Engine parameters listed below shall be monitored:

- a. Coolant Temperature _____
- b. Oil Pressure _____
- c. Battery Voltage _____
- d. Engine RPM _____

The controller shall monitor and provide alarm indication and subsequent shutdown for the following conditions. All alarms and shutdowns are accompanied by an engine hour stamp that is stored by the control panel for first and last occurrence. The following will cause an Engine Alarm/Shutdown:

- a. High coolant temperature alarm/shutdown _____
- b. Watchdog (CPU Functioning) shutdown _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

- c. Low oil pressure alarm/shutdown _____
- d. Loss of coolant shutdown _____
- e. Overcrank shutdown _____
- f. Overspeed shutdown _____
- g. Low coolant temperature alarm _____

The following will cause a Generator Alarm/Shutdown:

- a. Generator phase sequence _____
- b. Generator over voltage _____
- c. Generator under voltage _____
- d. Generator over frequency _____
- e. Generator under frequency _____

The following must be programmable from the controller keypad:

- a. time delay settings _____
- b. generator run time (0 to 72 hours) – exercise _____
- c. load shed _____
- d. engine start _____
- e. engine cooldown _____
- f. overvoltage and undervoltage delays _____
- g. crank on and crank pause time _____
- h. idle time _____
- i. Trip point settings _____
- j. high battery voltage _____
- k. low battery voltage _____
- l. overspeed _____
- m. underfrequency _____
- n. overfrequency _____
- o. overvoltage _____
- p. undervoltage _____

The generator set shall interface to the SCADA control system. Hardwired I/O shall include the following:

- a. Generator run status _____
- b. Generator fault _____
- c. Generator low fuel _____

Generator Weather/Sound Protective Enclosure

The complete diesel engine generator set, including generator control panel, engine starting batteries and fuel oil tank, shall be enclosed in a factory assembled,

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

weather protective enclosure mounted on the fuel tank base.

The enclosure must provide security from vandals and be aesthetically pleasing as well. In addition the enclosure must meet applicable National Electric Code (NEC) and National Fire Protection Association (NFPA) codes relating to clearances of all items included with the Generator Set.

The performance of the enclosure must be in accordance with the Generator Set's specific requirements for cooling and combustion airflow. Clearances must be adequate for maintenance personnel and/or doors must be located such that service personnel have adequate access.

The enclosure will be of Modular construction allowing complete flexibility in design and use. The enclosure must be capable of being modified in the factory or after installation to meet various field conditions.

A weather resistant enclosure of steel with electrostatically applied powder coated baked polyester paint. It shall consist of a roof, side walls, and end walls. Fasteners shall be either zinc plated or stainless steel. Handles shall be key lockable, all doors keyed alike, and hinges shall be zinc die cast or stainless steel. Access doors shall be hinged and can be lifted off after opening 90 degrees.

Intake louvers and enclosure overall must be able to maintain less the .01 ounces of moisture penetration per square foot of louver free area during a 4"/hr rainfall. Intake openings shall be screened to prevent the entrance of rodents or pests.

Radiator cooling air shall be discharged vertically through the roof of the enclosure.

Lifting provisions must be provided in the base that enables the complete Gen-set with the enclosure to

Company Name: _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

be lifted without damage. _____

The roof must be capable of supporting the largest commercially available silencer recommended for this particular model Gen-set. _____

Exhaust silencer(s) shall be mounted above the roof using heavy-duty corrosion resistant brackets. _____

The exhaust system shall include a roof penetration section that will eliminate rain or water run-off from entering the enclosure. _____

The generator set shall be sound attenuated to a level suitable for a residential area. The generator set shall be provided with a sound attenuated enclosure. The generator set shall also include an exhaust silencing system and an air intake silencing system. The overall sound attenuating enclosure design shall limit the sound pressure at 60Hz full load at 23ft to 69dB(A). _____

Exterior Finish:

The exterior coating has been tested to withstand continuous salt spray testing at 100 percent exposure for 244 hours to a 5 percent salt solution at 92-97 F. The coating has been subjected to full exposure humidity testing to 100 percent humidity at 100 F for 24 hours. Tests are to be conducted in accordance with The American Standard Testing Methods Society. _____

Exterior Color:

The exterior coating shall be Manufacturer's standard. _____

Double Wall Sub Base Fuel Tank

Provide a double wall sub-base tank constructed to meet all local codes and requirements. A fuel tank base of 24 hour capacity shall be provided as an integral part of the enclosure. It shall be contained in a rupture basin with 110% capacity. A locking fill cap, a mechanical reading fuel level gauge, low fuel level alarm contact, and fuel tank rupture alarm

Company Name: _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

contact shall be provided. _____

The sub base fuel system is listed under UL 142, sub section entitled Special Purpose Tanks EFVT category, and will bear their mark of UL Approval according to their particular classification. _____

The above ground steel secondary containment rectangular tank for use as a sub base for diesel generators is manufactured and intended to be installed in accordance with the Flammable and Combustible Liquids Code—NFPA 30, the Standard for Installation and Use of Stationary Combustion Engine and Gas Turbines—NFPA 37, and Emergency and Standby Power Systems—NFPA 110. _____

Primary Tank Construction:

It will be rectangular in shape and constructed in clam shell fashion to ensure maximum structural integrity and allow the use of a full throat fillet weld. _____

Steel Channel Support System:

Reinforced steel box channel for generator support, with a load rating of 5,000 lbs. per gen set mounting hole location. Full height gussets at either end of channel and at gen set mounting holes shall be utilized. _____

Venting:

Normal venting shall be sized in accordance with the American Petroleum Institute Standard No 2000, Venting Atmospheric and Low Pressure Storage Tanks not less than 1-1/4" (3 cm.) nominal inside diameter. A 1 -1/4" atmospheric mushroom cap shall be furnished and the installing contractor shall pipe above the highest fill point as a minimum. _____

Company Name: _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

Emergency Venting:

The emergency vent opening shall be sized to accommodate the total capacity of both normal and emergency venting and shall be not less than that derived from NFPA 30, table 2-8, and based on the wetted surface area of the tank. The wetted area of the tank shall be calculated on the basis of 100 percent of the primary tank. A zinc plated emergency pressure relief vent cap shall be furnished for the primary tank. The vent is spring-pressure operated: opening pressure is 0.5/psig and full opening pressure is 2.5 psig. Limits are stamp marked on top of each vent. The emergency relief vent is sized to accommodate the total venting capacity of both normal and emergency vents.

Fuel Fill:

There shall be a 2" NPT opening within the primary tank with an 8" raised fill pipe and lockable manual fill cap.

Fuel Level:

A direct reading, UL listed, magnetic fuel level gauge with a hermetically-sealed vacuum tested dial shall be provided to eliminate fogging.

Low Fuel Level Switch:

Consists of a 50 watt float switch for remote or local annunciation of a (50% standard) low fuel level condition.

Accessories:

Provide a generator mounted 80% circuit breaker, molded case type 300 amp trip, 3 pole. The breaker shall be UL/CSA Listed and connected to engine/generator safety shutdowns. Breaker shall be housed in an extension terminal box which is isolated from vibrations induced by the generator set. Mechanical type lugs, sized for the circuit breaker feeders shown on drawing, shall be supplied on the load side of breaker.

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

Engine block heater. Thermostatically controlled and sized to maintain manufacturers recommended engine coolant temperature to meet the start-up requirements of NFPA-99 and NFPA-110, Level 1.

Critical Silencer. A residential grade silencer, companion flanges, and flexible stainless steel exhaust fitting properly sized shall be furnished and installed according to the manufacturer's recommendation. The engine exhaust silencer shall be temperature and rust resistant, and rated for critical applications. The silencer will reduce total engine exhaust noise by 25-35 db(A).

Quality Assurance:

The complete power generation system, including engine, generator, and switchgear, shall be the product of one manufacturer who has been regularly engaged in the production of complete generating systems for a least twenty (20) years. All components shall have been designed to achieve optimum physical and performance compatibility and prototype tested to prove integrated design capability. The complete system shall have been factory fabricated, assembled, and production tested. The naming of a specific manufacturer does not waive any requirements of this specification.

Responsibility:

The responsibility for performance to this specification shall not be divided among individual component manufacturers, but must be assumed solely by the primary manufacturer. This includes generating system design, manufacture, test, and having a local supplier responsible for service, parts, and warranty for the total system.

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

Minimum Service & Warranty Qualifications:

The manufacturer shall have a local authorized dealer who can provide factory-trained servicemen, the required stock of replacement parts, technical assistance, and warranty administration.

The engine-generator supplier shall maintain 24-hour parts and service capability within 100 miles of the project site. The distributor shall stock parts as needed to support the generator set package for this specific project. The supplier must carry sufficient inventory to cover no less than 80% parts service within 24hrs and 95% within 48 hours.

Warranty Terms:

The manufacturer's and dealer's extended warranty shall in no event be for a period of less than two (2) years from date of initial start-up of the system and shall include repair parts, labor, reasonable travel expense necessary for repairs at the jobsite, 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.

Maintenance & Spare Parts:

The system manufacturer's authorized dealer shall furnish the owner's engineer with a copy of any contract maintenance agreement negotiated relative to the equipment specified in this section. The contract information shall detail agreed maintenance intervals, work to be performed at each interval, reimbursement schedule for maintenance work, and owner's responsibilities versus dealer's responsibilities.

Company Name: _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

Provide a priced listing of all recommended spare parts with the bid package. _____

Start-up & Training:

Furnish the services of a factory-authorized service representative to verify the installation of the generator and transfer switch and, instruct the Owner's personnel in the operation, maintenance, and adjustment of the generator and related equipment. Provide a minimum of eight (8) hours on-site testing and instruction time scheduled seven (7) days in advance. _____

Company Name: _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

Automatic Transfer Switch:

The ATS unit shall be an ASCO model number J03AUSA30400FGXP,11BE,18RX,44G,73AB1, or City Engineer approved alternate.

Note: Supplier to confirm model number is complete and meets all specification requirements

Quantity: 1

Mechanically Held Transfer Switch:

The transfer switch unit shall be electrically operated and mechanically held. The electrical operator shall be a single-solenoid mechanism, momentarily energized. Main operators which include overcurrent disconnect devices will not be accepted. The switch shall be mechanically interlocked to ensure only one of two possible positions, normal or standby.

The switch shall be positively locked and unaffected by momentary outages so that contact pressure is maintained at a constant value and temperature rise at the contacts is minimized for maximum reliability and operating life.

All main contacts shall be silver composition. Switches rated 600 amperes and above shall have segmented blow-on construction for high withstand current capability and be protected by separate arcing contacts.

Inspection of all contacts shall be possible from the front of the switch without disassembly of operating linkages and without disconnection of power conductors. A manual operating handle shall be provided for maintenance purposes. The handle shall permit the operator to manually stop the contacts at any point throughout their entire travel to inspect and service the contacts when required.

Company Name: _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

Designs utilizing components of molded-case circuit breakers, contactors, or parts thereof which are not intended for continuous duty, repetitive switching or transfer between two active power sources are not acceptable.

Where neutral conductors must be switched, the ATS shall be provided with fully rated neutral transfer contacts.

Where neutral conductors are to be solidly connected, a neutral terminal plate with fully-rated AL-CU pressure connectors shall be provided.

Overcurrent Protection Device –
The normal connection shall be provided with a 300 AMP thermal magnetic, 3 pole, 80% rated molded case circuit breaker.
It shall have a thermal magnetic trip unit

Microprocessor Controller:

The controller shall direct the operation of the transfer switch. The controller's sensing and logic shall be controlled by a built-in microprocessor for maximum reliability, minimum maintenance, and inherent serial communications capability and the ability to communicate via the Ethernet through optional communications module.

The controller shall be connected to the transfer switch by an interconnecting wiring harness. The harness shall include a keyed disconnect plug to enable the controller to be disconnected from the transfer switch for routine maintenance.

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

A single controller shall provide single and three phase capability for maximum application flexibility and minimal spare part requirements. Voltage sensing shall be true RMS type and shall be accurate to $\pm 1\%$ of nominal voltage. Frequency sensing shall be accurate to $\pm 0.1\text{Hz}$. Time delay settings shall be accurate to $\pm 0.5\%$ of the full scale value of the time delay.

The controller shall be enclosed with a protective cover and be mounted separate from the transfer switch unit for safety and ease of maintenance. Sensing and control logic shall be provided on printed circuit boards.

Interfacing relays shall be industrial grade plug-in type with dust covers.

The controller shall meet or exceed the requirements for Electromagnetic Compatibility (EMC) as follows:

- a. ANSI C37.90A/IEEE 472 Voltage Surge Test
 - b. NEMA ICS – 109.21 Impulse Withstand Test
 - c. IEC 60947 – 6 – 1 Multiple Function Equipment Transfer Switching Equipment. 61000-4 Testing And Measurement Techniques – Overview
 - d. IEC 61000 – 4 - 2 Electrostatic Discharge Immunity b. IEC 61000 – 4 - 3 Radiated RF Field Immunity
 - e. IEC 61000 – 4 - 4 Electrical Fast Transient/Burst Immunity
 - f. IEC 61000 – 4 - 5 Surge Immunity
 - g. IEC 61000 – 4 – 6 Conducted RF Immunity
 - h. CISPR 11 – Conducted RF Emissions and Radiated RF Emissions
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Environmental Ratings:

The ATS unit shall be furnished in a NEMA Type 4X stainless steel enclosure.

Company Name: _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

The ATS unit shall be designed to operate at an ambient temperature from -20C to +70C (-4F to 158F).

The storage temperature range shall be -40C to +85C (-40F to 185F).

The ATS unit shall be designed to operate with relative humidity of 5% to 95% non-condensing.

The ATS unit shall be rated to operate at altitudes less than or equal to 3,300 feet (1000 m).

The enclosure shall be equipped with a strip heater to prevent condensation inside the enclosure.

The enclosure shall be equipped means to secure enclosure.

Electrical Ratings:

The ATS unit shall be designed to operate from an input voltage of 240 VAC $\pm 10\%$, 3 \emptyset , 60Hz., 3-wire.

The ATS unit shall operate from an input voltage frequency range from 57 to 63 Hz.

The ATS shall be rated for 400 amps.

The ATS shall be Service Entrance rated.

Withstand and Closing Ratings –
The ATS shall be rated to close on and withstand 22,000 A rms symmetrical short circuit current at the ATS terminals with the type of overcurrent protection shown on the plans.

Control System Interface:

ATS interface to the SCADA/Telemetry system with hardwired I/O shall include:

- a. Transfer Switch Normal

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

b. Transfer Switch Standby _____

Voltage & Frequency Sensing:

The voltage and frequency of each phase on both the normal and standby sources shall be continuously monitored, with pickup dropout, and trip settings capabilities (values shown as % of nominal unless otherwise specified).

<u>Parameter</u>	<u>Dropout/Trip</u>	<u>Pickup/Reset</u>	
Undervoltage	70 to 98%	85 to 100%	_____
Overvoltage	102 to 116%	2% below trip	_____
Underfrequency	85 to 98%	86 to 100%	_____
Overfrequency	101 to 111%	2% below trip	_____

Repetitive accuracy of all settings shall be within 1% at +25°C. _____

Voltage and frequency settings shall be field adjustable in 1% increments either locally with the display and keypad or remotely via serial communications port access. _____

Source status screens shall be provided for both normal & standby to provide digital readout of voltage and frequency.
Note: Single phase sensing on standby. _____

Time Delays:

An adjustable time delay shall be provided to override momentary normal source outages and delay all transfer and engine starting signals. _____

An adjustable time delay shall be provided on transfer to standby, adjustable from 0 to 60 minutes for controlled timing of transfer of loads to standby. _____

An adjustable time delay shall be provided on retransfer to normal, adjustable 0 to 10 hours. Time delay shall be automatically bypassed if standby source fails and normal source is _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

acceptable. _____

A cooldown time delay shall be provided on shutdown of engine generator, Adjustable 0 to 60 minutes. _____

All adjustable time delays shall be field adjustable without the use of tools. _____

Additional Features:

A set of contacts rated 5 amps, 30 VDC shall be provided for a low-voltage engine start signal. The start signal shall prevent dry cranking of the engine by requiring the generator set to reach proper output, and run for the duration of the cool down setting, regardless of whether the normal source restores before the load is transferred. _____

The user interface shall be provided with test/reset modes. The test mode will simulate a normal source failure. The reset mode shall bypass the time delays on either transfer to standby or retransfer to normal. _____

Auxiliary contacts, rated 10 amps, 250 VAC shall be provided consisting of one contact, closed when the ATS is connected to the normal source and one contact, closed, when the ATS is connected to the standby source. _____

LED Indicating lights shall be provided, one to indicate when the ATS is connected to the normal source (green) and one to indicate when the ATS is connected to the standby source (red). Also provide indicating lights for both normal and standby source availability. Additionally provide indicating lights for switch not in automatic mode (manual); and blinking (amber) to indicate transfer inhibit. _____

Terminals shall be provided to indicate actual availability of the normal and standby sources,

Company Name: _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

as determined by the voltage sensing pickup and dropout settings for each source.

In-phase Monitor - An Inphase monitor shall be inherently built into the controls. The monitor shall control transfer so that motor load inrush currents do not exceed normal starting currents, and shall not require external control of power sources. The inphase monitor shall be specifically designed for and be the product of the ATS manufacturer.

Selective Load Disconnect – Not Required

Programmable Engine Exerciser - A seven or fourteen day programmable engine exerciser with digital readout display. Shall include one form C contact for availability of normal and standby. Include “with or without” load control switch for exerciser period. The exerciser shall be backed up by a permanent battery.

A Transient Voltage Surge Suppression (TVSS) with a surge current rating of 65kA shall be provided with individually matched fused metal oxide varistors (MOVs). It shall include LED status indication of normal operation, under voltage, power loss, phase loss or component failure. Shall include form C dry contacts for external alarm or monitoring.

Quality Assurance:

The ATS unit shall be manufactured by one supplier in an ISO 9001 certified facility.

The ATS unit and all associated optional equipment shall be UL listed and labeled. A UL label shall be attached inside each unit as verification.

The ATS unit shall be designed, constructed and tested in accordance with UL, CSA, NEMA & NEC standards and shall be third party

Company Name: _____

**BID SPECIFICATIONS
102 KW STANDBY GENERATOR
WITH AUTOMATIC TRANSFER SWITCH
ITB# 6291**

certified by UL, CSA and NOM. _____

The manufacturer of the ATS unit shall have been specialized in the design and production of ATS units for a period of at least 10 years. _____

All factory supplied options shall be completely tested for successful operation before shipment. _____

Quality Assurance documentation shall be furnished to the owner to verify successful completion of the above tests. _____

Warranty Terms:

The manufacturer's and dealer's extended warranty shall in no event be for a period of less than two (2) years from date of initial start-up of the system and shall include repair parts, labor, reasonable travel expense necessary for repairs at the jobsite, 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. _____

Start-up & Training:

The ATS unit manufacturer shall provide a factory certified technical representative to supervise the contractor's installation, testing and start-up of the soft start controller unit(s) furnished under this specification for a maximum total of 1 day. _____

An on-site training course of 1 training day shall be provided by a representative of the ATS unit manufacturer to plant and/or maintenance personnel. _____

COMPLETE AND RETURN WITH BID PACKAGE

Company Name: _____



CITY OF JOHNSON CITY, TENNESSEE
<http://www.johnsoncitytn.org/purchasing>

SEALED SOLICITATION
GENERAL TERMS AND CONDITIONS
(Read Carefully)

1. ACCEPTANCE, REJECTION AND POSTPONEMENT

Issuance of a bid/rfp/rfq does not commit the City to make an award. The City reserves the right to postpone or reject any or all bids/rfps/rfqs, to waive informalities and to accept the bid/rfp/rfq judged to be in the best interest of the City.

2. ADDENDA

Addenda will be issued to all known interested parties and posted on the City's website (listed above). All addenda issued shall become part of the solicitation documents. It is the vendor's responsibility to determine and acknowledge all addenda issued for a solicitation. No addendum will be issued less than two (2) working days prior to the solicitation opening as per TCA, Title 12, Chapter 4, Part 1, as amended

3. AWARD

An award, if made, shall be to the lowest responsible, responsive bidder(s) or best solicitation meeting quality and performance standards as described in the solicitation documents and whose bid/rfp is determined to be in the best interest of the City. The City also reserves the right to award this product/service based on other contracts in-place (state or cooperative contracts), as may be in our best interest.

4. AWARD PERIOD

The City shall have 60 days to issue a contract. Any contract past that period must be mutually agreed upon by both parties.

5. BID TABULATIONS/RFP/RFQ RESPONSES

Bid tabulations and RFP/RFQ respondent's lists will be posted and available the next business day on our above website. Click on "awarded/opened solicitations".

6. BRAND NAMES

By referencing a brand name or equal, the City intends to establish a minimum level of quality by which alternate offers can be judged. If an alternate is offered, the vendor must include complete descriptive literature and specifications that clearly describe the item and how it differs from the referenced item. Vendor reference to literature previously submitted will not satisfy this provision. Unless specified otherwise, it is understood that the referenced product will be furnished. The City alone will determine whether an alternate is equivalent and meets the standards of quality and performance for the City's use. A sample or demonstration may be required at the expense of the vendor.

7. CONDITION STANDARDS

It is understood and agreed that any item offered or shipped as a result of this solicitation shall be new and unused and the manufacturer's latest model unless otherwise called for in the solicitation.

8. CONSTRUCTION DOCUMENTS

If a fee is required for bid documents then only those bidders of record with the issuing office are eligible to bid.

9. DEFAULT

In case of contractor default or failure to provide material or service according to the solicitation, the City may cancel this contract and acquire from another source and may recover any excess cost by (1) invoice; (2) deduction from an unpaid balance due; (3) collection against the bid and/or performance bond; or (4) a combination of the aforementioned remedies or other remedies provided by law. All costs associated with default will be borne by the contractor. The City reserves the right to remove a company in default from the active vendor list for a time period to be determined by the Director of Purchasing.

10. DELIVERY

Delivery/completion schedule must be clearly identified and realistically stated, as this may be a determining factor in the award.

11. DISCOUNT AND PAYMENT

Payment terms are Net 30 following receipt of the material or service and a correct invoice unless otherwise stated in the solicitation document. Discounts for prompt payment will not be considered in the bid evaluation for award. Partial payment will be allowed only if addressed in the solicitation.

12. EQUAL OPPORTUNITY

It is the policy of the City of Johnson City to ensure compliance with Title VI of the Civil Rights Act of 1964; 49 CFR, Part 21; related statutes and regulations to that end that no person shall be excluded from participation in or be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance or any other funding source on the grounds of race, color, sex, national origin, or ancestry. By virtue of submitting a response to this solicitation, vendors agree to comply with the same non-discrimination policy.

13. EVALUATION

Bids/RFPs/RFQs will be evaluated according to the criteria set forth in the document with the degree of importance determined by the City.

14. EXAMINATION OF BIDS/RFPs/RFQs

Bids and associated documents may be examined at the opening. Only the name of the respondent is read aloud for RFPs/RFQs. All solicitations are closed for review and inspection during the evaluation period, prior to award.

15. FOB (FREE-ON-BOARD) POINT

All prices quoted shall be FOB destination, freight prepaid and allowed unless otherwise stated in the solicitation document. The seller pays and bears the freight charges and owns the goods while they are in transit. Title passes at the designated City location.

16. INDEMNIFICATION

The vendor shall guarantee and certify by submitting a response to this solicitation that if successful, they shall indemnify and defend the City against any and all claims or legal actions arising as a result of their performance of the contract, whether or not such claims relate to damages or alleged damages sustained by physical injury to contractors personnel, subcontractors, city employees or other persons, or against any lawsuits arising from alleged or actual patent infringements, and shall hold the City, its various departments, employees, and any and all persons or entities acting on its behalf harmless from the same.

17. INSPECTION

All supplies or materials purchased as a result of this solicitation are subject to inspection and rejection by the City. Rejected materials will be returned at the vendor's expense.

18. INSURANCE

The contractor shall maintain, at their expense, such insurance as required by the solicitation. Such insurance shall protect the City for claims of damages which may arise during operations under this contract whether such operations be by the Contractor or by any subcontractor or anyone directly or indirectly employed by either of them. Any required insurances shall be maintained for the term of the contract and beyond the term of the contract when so required in the solicitation.

19. IRAN DIVESTMENT ACT

Pursuant to the Iran Divestment Act Tenn. Code Ann. § 12-12-106 requires the State of Tennessee Chief Procurement Officer to publish, using creditable information freely available to the public, a list of persons it determines engage in investment activities in Iran, as described in § 12-12-105. Inclusion on this list makes a person ineligible to contract with the City of Johnson City; if a person ceases its engagement in investment activities in Iran, it may be removed from the list. The State of Tennessee list is available here: <http://tennessee.gov/generalservices/article/Public-Information-library>

20. LICENSES, FEES, PERMITS

The contractor is responsible for furnishing the proper licenses, fees, and permits required by law to do business with the City of Johnson City in completion of the project. All work shall be done in accordance with the latest building codes, state and federal laws relative to the contract.

21. MULTIPLE ITEM BIDS

The City will determine the successful bidder(s) either on the basis of the individual line items or the total of all items. ALL OR NONE bids must be clearly identified on the bid form and will be considered only if in the City's best interest.

22. NON-COLLUSION AGREEMENT

By submitting this solicitation, the agent representing all officers, partners, owners, representatives, employees or interested parties of the vendor's firm certifies to the best of his/her knowledge and belief this bid/proposal to the City of Johnson City, Tennessee has not been prepared in collusion with any other seller, proprietor, or manufacturer of similar products or services. The agent also certifies that the prices, terms and conditions of said bid/proposal have been arrived at independently and have not been communicated by the submitter, nor by any of the aforementioned firm associate to any other seller, proprietor, or manufacturer of similar products or services and will not be communicated prior to the official opening of said solicitation. The agent further states that no official or employee of the City of Johnson City has promised any personal, financial or other beneficial interest, either directly or indirectly, in order to influence award of this solicitation.

23. PARTS AND SERVICE

The successful vendor must be able to provide adequate parts and service for all items awarded. Service location and ability to perform may be a consideration in the award.

24. PENALTIES

Vendors may be removed from our active vendor system for any of the following:

- ◆ Failure to respond to three consecutive solicitations
- ◆ Failure to meet delivery requirements
- ◆ Failure to furnish items as a result of a solicitation
- ◆ Failure to provide service or material as a result of the award
- ◆ Offers of gratuities or favors to any City employee

25. PRE-BID MEETING ATTENDANCE

If attendance is mandatory then only those firms whose names are listed on the pre-bid attendance roster are eligible to submit a solicitation.

26. PRICING

All pricing must appear in the spaces provided on the city's form (if applicable) and be in ink or typed. Changes or corrections by the bidder/proposer must be initialed in ink by the person signing. No corrections may be made in pencil. Unit prices will prevail in case of an extension error. The City will correct math computation errors (unit price & totals). No bid may be altered or amended after bid opening time. Obvious mistakes will be given special consideration upon receipt of written request and full disclosure or evidence regarding pricing error.

27. PROPRIETARY/CONFIDENTIAL INFORMATION

Vendors are hereby notified that all information submitted as part of, or in support of, bids/proposals will be available for public inspection after award, in compliance with Tennessee Statutes.

28. PROTEST PROCEDURE

Any protest to the award of a contract by the City of Johnson City shall be submitted in writing to the Director of Purchasing with a copy to the City Manager and delivered not later than seven (7) calendar days from the date of the city's award decision. Such protest must include a protest bond in the amount of \$350 (cashier's check payable to the City of Johnson City or Cash) submitted to the Purchasing Director before the City will consider the protest. This protest bond will serve as a guarantee by the protester of the validity and accuracy of the protest. If the protest is denied by the City Manager the bond will be retained to cover costs associated with the protest.

29. QUESTIONS

Questions must be received by the City at least four (4) working days prior to the scheduled opening. No oral interpretations or instructions given by any city employee or any other person shall apply. Changes relative to any solicitation will be in writing, in the form of an addendum.

30. SAFETY STANDARDS

All manufactured items and fabricated assemblies shall comply with applicable requirements of OSHA/TOSHA and any related standards thereto.

31. SAMPLES

Samples will be furnished at no charge to the City. They will remain in the Purchasing Department for testing and evaluation until an award is made. Vendors are responsible for picking up their samples within two (2) weeks after the award. Samples not collected after that time shall become the property of the City. Samples from the successful vendor will be held until delivery is received and accepted as being equal to the sample.

32. SEALED SOLICITATION OPENINGS

Bids will be read aloud at the specified date and time as stated in the document. RFP's/RFQ'S respondent names will be read aloud. All openings are public meetings. Bidders/proposers and interested persons are invited to attend. The City reserves the right to postpone any solicitation opening under circumstances warranting such action, including but not limited to instances when the City receives fewer than two responses.

33. SIGNATURE ON BIDS

When submitting a bid, other than electronically, the bid form must contain the full name and address of the company and be signed in Ink by a person authorized to bind that company to a contract. Submission of an electronic solicitation constitutes acceptance of all terms and conditions. Unsigned paper bids will not be considered, read or tabulated. They may not be signed during or after the bid opening, even if a representative is present.

34. SUBMITTAL OF SEALED BIDS/RFPS/RFQS

Any forms furnished by the city must be completed and returned as specified in the solicitation, otherwise response will be considered as non-responsive. TELEPHONE, FACSIMILE OR E-MAIL RESPONSES WILL NOT BE ACCEPTED. Electronic receipt of bids/proposals is acceptable for those posted at: <https://vrapp.vendorregistry.com/Vendor/Register/Index/johnson-city-tn-vendor-registration>. **Paper bids shall be sealed in an envelope.** No solicitation received after closing time shall be considered. The official time for paper submittals will be that of the date and time clock in the Purchasing Department. For electronic bids the official time is that posted on the website. Late submittals will not be accepted. The City of Johnson City shall not be responsible for technical difficulties experienced by vendors trying to register or submit their bid/rfp response electronically less than one hour prior to the bid/rfp opening time. If not offering a solicitation response, the vendor is encouraged to complete the "Statement of Decline" form and return prior to the opening.

35. TAXES

The City is exempt from Federal excise tax, State, and city sales tax. Contractors are not exempt from the use tax on materials and supplies used in the production of an item or in the performance of a repair or construction contract. Tax exemption certificates will be furnished upon request.

36. TERM OF CONTRACT

Unless otherwise stated, the City reserves the right to purchase like items at the same contract price for a period of one year from the award date subject to agreement of both parties. The City may cancel any contract for cause, or non-appropriation of funds, following written notification of intent.

37. WARRANTY

Unless otherwise specified by the City, all items shall be guaranteed for a minimum period of one (1) year against defects in material and workmanship.

REQUIREMENTS FOR BIDS, REQUESTS FOR PROPOSALS, AND CONTRACTS
BETWEEN THE CITY OF JOHNSON CITY
AND OTHER PARTIES

The City of Johnson City has established the following requirements for use in all bids and contracts between the City and any other person or entity. The following list is mandatory and modifies any bid, contract, or request for proposal, or conditions applicable to, signed by, or let by the City, notwithstanding anything contained in any particular conditions, contract, request for proposal, or bid to the contrary.

In general, the following provisions apply to all such contracts, bids, requests for proposals, contracts requiring bids, and bids containing contracts:

1. The City of Johnson City shall not answer to any contracting party for the furnishing of public records to a person requesting such in accordance with Tennessee law.
2. The City, while it may designate in writing a representative on a particular project, shall only be bound by a majority vote of the Board of Commissioners or by the limited authority delegated to the City Manager pursuant to City Ordinance. No personal representative of the City assigned to a particular project may bind it in excess of the dollar amounts granted to the City Manager by Ordinance, and no personal representative assigned to a particular project may bind the City for an amount equal to or less than the dollar amounts granted to the City Manager by Ordinance without the City Manager's approval.
3. The City shall not in any event waive or limit any claims for damages including but not limited to consequential damages in any contract for any reason or purpose.
4. No decision of an architect, engineer, or personal representative of the City shall be final and binding on the City, unless the City so agrees in any dispute with any

party including but not limited to an architect, a contractor, a subcontractor, an engineer, etc. If the City agrees to be bound pertaining to a dispute, then the monetary limits contained in the City's ordinances regarding the authority of the City Manager shall prevail, and any amounts exceeding the authority of the City Manager shall be referred to the Board of Commissioners for their consideration.

5. The City shall not participate in any mediation or arbitration regarding any agreement to which it is a party, and all matters left unresolved between the City and any other party, person, or entity shall be resolved in a court of competent jurisdiction in either Washington County, Tennessee, or in Federal District Court in Greeneville, Tennessee.

6. No party or other entity shall file a lien of any nature whatsoever against City property, real, personal, or mixed, no matter where that property is located. Should a party or entity contracting with the City or acting as a subcontractor or subsubcontractor file a lien against any property, real, personal, or mixed, owned by the City, then that party or entity shall take immediate steps at its own cost and expense to remove said lien, or the City shall take such steps as it deems necessary and hold the other party or entity liable for any costs and attorneys' fees associated with the lifting of said lien.

7. The City shall exercise its sole discretion before agreeing to any assignments of any contracts or subcontracts regarding any project in which the City is involved. No contract with the City shall be assignable without the City's sole, discretionary, absolute consent.

8. The City shall not be required to supply any information regarding its title to any property in which it has an interest for any purposes regarding the filing of liens.

9. The City shall not waive any claims it has in the making of final payment in any project in which it is involved. The City shall have the right to terminate any agreement to which this document is attached at any time in its sole discretion with or

without cause. In the event the City terminates with or without cause any agreement to which this document is attached, then in such event the City shall be liable only for the actual work and costs that have accrued at or before the date of the City's termination. In no event shall the City be liable for lost profits, consequential damages or incidental damages in the event it terminates a contract with or without cause.

10. Except to the extent allowed by law, the City shall not indemnify and hold harmless any other party, entity, person, their agents, employees, or anyone else in the world for any reason whatsoever.

11. The City shall not waive the rights of subrogation of its insurers or itself for any purpose whatsoever, and the City shall not cause any such endorsements to be placed on any policies to which it is a party.

12. Unless the City elects otherwise, the City shall not provide any "builders' risk" or an "all-risk" or equivalent policy for any reason whatsoever for any project in which the City has an interest, and the contractor or other such party shall assume this responsibility. That builder's risk policy provided by the contractor or other such interested party shall name the City as an additional insured. The City shall not provide boiler and machinery insurance, but shall require such insurance as applicable, depending on the parameters of whatever project is involved. The cost of boiler and machinery insurance shall be borne by the appropriate contractor, subcontractor, or other interested party. The City shall not insure the interests of any other person or entity, nor shall the City add any other person or entity as an additional insured to any of its policies.

13. The City shall not waive any rights regarding the loss of use of the City's property.

14. As to acts or failures to act or any causes of action by any party to a contract, whether that party be the architect, owner, contractor, City, etc., a cause of action shall accrue according to Tennessee law. No contract provision shall shorten the

statutes of limitations, statutes of repose, or the accrual of any causes of action which the City might have against another party or entity. No contract provision shall waive any warranties, express or implied, nor shall any contract limit the standard of care for any particular service or undertaking to that of the locality where those services or undertakings are performed.

15. Any interest to be paid by the City of Johnson City for late payments shall be at the rate of interest at which the City pays on its most recently issued bonds.

16. The City reserves to itself the right to approve the use of any tests, including but not limited to any borings, test pits, geotechnical work, environmental tests, and the like in its own sole discretion. All design professionals, consultants, subcontractors, or the like shall be duly licensed in the State of Tennessee, if licensure in the State of Tennessee is required for the work to be performed by such design professional, consultants, or subcontractors.

17. Notwithstanding any applicable choice of law or conflict of law provisions or decisions, the law of the State of Tennessee shall govern all contracts to which this document is attached.

18. The City of Johnson City shall not provide any legal advice, legal services, surveys, or procure the same for any other party.

19. Upon payment for services as rendered, all design documents and all instruments of service created by design professionals, including but not limited to architects, landscape architects, engineers, etc., shall become the property of the City of Johnson City, Tennessee. The City of Johnson City shall be allowed to use all design documents and instruments of service, including but not limited to bid drawings, shop drawings, reports, specifications, cost estimates, schematic designs, construction designs, and the like for future additions or alterations to the current project or for use in other projects. Any use of the aforementioned designs and construction documents shall be at

the City's sole risk and without liability to the design professional. The design professional's name and seal will be removed from all such design documents prior to the City's use thereof.

20. The City, as the owner of real property that is the subject of or in any way connected to any bid, request for proposal, or contract, hereby grants to the successful bidder/proposer/contractor the general management of the real property during the time that work is being performed, and the City agrees to transfer information specified in OSHA regulations at 29 CFR §1926.1203(h)(1), so that TOSHA/OSHA shall treat the successful bidder/proposer/contractor as the host employer when working in confined spaces. This paragraph applies only to those areas where the successful bidder/proposer/contractor has access to and performs work within confined spaces as defined in federal OSHA regulations. The successful bidder shall comply with all federal OSHA and state TOSHA regulations, including those regarding confined spaces.

September, 2017



STATEMENT OF SOLICITATION DECLINE City of Johnson City, Tennessee

NOTE: If you do not intend to respond to this solicitation, please complete and return this form on or before the stated deadline to Purchasing Department, P. O. Box 2150, Johnson City, TN 37605 or via e-mail or fax: purchasing@johnsoncitytn.org; 423-975-2712.

We value your feedback and ask that you complete the following:

Solicitation No.: # _____
Solicitation Name: _____

We, the undersigned, decline to submit on the above bid/proposal for the following reason(s):

- _____ Insufficient time to adequately prepare a response
- _____ Our company does not offer this product or service. Remove us from the vendor list
- _____ Our schedule will not permit us to perform in a timely manner
- _____ We are unable to meet bond requirements
- _____ We are unable to meet insurance requirements
- _____ We are unable to offer comparable product or service
- _____ We are unable to meet specifications (explain below)

We understand that if this statement is not completed and returned, our company may be deleted from the City's solicitation list for this commodity or service.

Company Name: _____
Address: _____
Signature: _____
Telephone: _____
E-mail: _____
Date: _____