



CHIPPEWA COUNTY REQUEST FOR QUOTATIONS

GENERATOR PROJECT

ISSUED BY: CHIPPEWA COUNTY BOARD OF COMMISSIONERS

6/6/24

**Project Representative: Greg, Director
Chippewa County Office of Emergency Services
4657 W. Industrial Park Drive
Kincheloe, MI 49788**

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CHIPPEWA COUNTY NOTICE OF RECEIVING QUOTATIONS

Chippewa County seeks quotations from qualified firms, on a competitive basis, for one (1) Generator. Qualified firms and individuals may secure a copy of the bid specifications from:

Kelly Church, Assistant to the Controller
Chippewa County Courthouse
319 Court St.
Sault Ste. Marie, MI 49783-2194

Proposals received on or before 4:00 p.m. on Thursday August 1, 2024 will be considered. Chippewa County reserves the right to reject any or all proposals submitted.



CHIPPEWA COUNTY REQUEST FOR QUOTATIONS

GENERATORS PROJECT

I. INTRODUCTION

Chippewa County seeks quotations from qualified firms, on a competitive basis, for one (1) generators.

A. Bid Submittal and Project Representative

To be considered, firms must submit a complete, sealed response to this Request for Quotations (RFQ), using the format provided. Requests for information or interpretation of the intent of the RFQ and any/all other inquiries must be addressed to:

Greg Postma, Director
Chippewa County Office of Emergency Services
4657 W. Industrial Park Drive
Kincheloe, MI 49788
(906) 495-7488

Contact with any other Chippewa County personnel regarding this RFQ will be considered grounds for elimination from the selection process.

B. Submittal Requirements and Deadline

Each proposal must be submitted on the approved form in a sealed envelope, plainly marked "CHIPPEWA COUNTY GENERATOR PROJECT" on the exterior. An official authorized to bind the firm to its provisions must sign proposals. To be considered a valid response to this Request for Quotations, the proposal must remain valid for at least sixty (60) days. Chippewa County is not liable for any cost incurred by the firm prior to the issuance of a contract. Proposals must be received on or before 4:00 p.m. on Thursday, August 1, 2024 to be considered.

C. Right of Refusal

Chippewa County reserves the right to reject any or all proposals, to negotiate separately with any source whatsoever in any manner necessary to attend to the best interests of the County, to waive irregularities in any proposal and to accept a proposal which best meets the needs of the County, irrespective of the bid price.

D. Disclosure of Proposals

Proposals are subject to disclosure under the Michigan Freedom of Information Act (Act 442, P.A. 1976, as amended, being MCL 15.231 through 15.246). After a contract award, a summary of total price information for all proposals will be furnished upon request.

E. Independent Price Determination

By submitting a proposal you certify, and in the case of a joint proposal, each party certifies as to its own organization, that in connection with this proposal:

1. The prices in its proposal have been determined independently without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other proposing party or with any other competitor.
2. Unless otherwise required by law, the prices which have been quoted in the proposal have not been knowingly disclosed by the proposing party and will not be knowingly disclosed to any competitor.
3. No attempt has been made or will be made by the proposing party to induce any other person or firm to submit or not submit a proposal for the purpose of restricting competition.

F. Each person signing the proposal certifies that:

1. (S)he is the person within the organization responsible for the decision as to prices being offered in the proposal, and that (s)he has not participated, and will not participate, in any action contrary to I.D.1,2 and 3, above; or
2. (S)he is not the person within the organization responsible for the decision as to the prices being offered in the proposal, but that (s)he has been authorized, in writing, to act as an agent for the persons responsible for such decisions in certifying that such persons have not participated, and will not participate, in any action contrary to I.D.1,2 and 3, above; and that (s)he has not participated, and will not participate, in any action contrary to I.D.1,2 and 3, above.

- G. Insurance Requirements. The successful firm will be required to provide and maintain public and professional liability, property damage, and worker's compensation insurance protecting, as they may appear, the interests of all parties to any agreement that may result from this RFQ. The firm is responsible for insuring the protection of all persons and property at all times. Documentation of the above insurance must be provided by the successful bidder prior to contract execution. Chippewa County must be included as a separate named insured.

The firm will be required to furnish appropriate certificates of insurance prior to commencement of any work undertaken on behalf of the County.

The effective dates and expiration dates of all policies should coincide with the term of the contract. If any of the insurance expires during the contract period, it will be necessary for a current certificate of insurance to be issued and filed with the County Controller's Office.

Minimum insurance requirements are as follows:

1. Commercial general liability insurance of limits not less than \$1,000,000 per occurrence. The limit may be higher depending upon the hazard involved, subject to review and recommendation of the County's licensed insurance counselor. Coverage is to include, but is not limited to premises, operations, products and/or completed operations, personal injury and contract liability.
2. Automobile liability including statutory no-fault coverages, including all owned, non-owned, and hired autos within limits of a minimum of \$1,000,000. The limit may be higher depending upon the hazard involved, subject to review and recommendation of the County's insurance counselor.
3. Worker's Compensation and Employers' Liability if the selected firm hires one or more persons or currently has employees. If the selected firm does not have any employees, an affidavit must be filed with the County Clerk stating that the firm has no employees and will not hire any while working for Chippewa County as a vendor or a subcontractor, etc. In addition, a Certificate of Assumed Name must be filed with the County Clerk.

Failure to comply with these insurance requirements may result in contract termination or delay in receipt of funds. The firm will be required to secure any/all necessary certificates and permits from municipal or other public authorities and comply with all licensing requirements and all federal, state and municipal laws, ordinances and regulations as may be required.

- H. County Liability. Officers, agents and employees of Chippewa County will not, in any manner, be liable for any loss or damage to any person or property connected to or resulting from any work done on behalf of the County. In addition, the selected firm agrees to indemnify, defend and save harmless, the County, its officers, agents and employees from any and all claims and losses accruing or resulting from the negligent performance of work as described in any agreement that results from this RFQ. These same standards will apply to subcontractors of the selected firm. The County will be relieved from all risks of loss or to equipment or personnel during this engagement, except when such loss or damage is due to the fault or negligence of the County.

II. SPECIFICATIONS

Chippewa County is seeking Proposals for the purchase of one (1) generator. This generator will be used to provide back-up power for Chippewa County Central Dispatch in the event of an emergency, disaster or homeland security incident. This unit must be extremely reliable. The proposal shall be based upon a “turn-key” concept that shall include all facets of providing, installing, testing, and certifying the equipment. All electrical work shall be preformed by a Licensed Electrical Contractor and include inspection approval from the State of Michigan.

A. GENERATOR

Chippewa County is requesting a commercial grade generator.

DESCRIPTION OF SYSTEM

Provide a Standby power system to supply electrical power in event of failure of normal supply, consisting of a liquid cooled engine, an AC alternator and system controls with all necessary accessories for a complete operating system, including but not limited to the items as specified hereinafter.

Provide an automatic transfer switch described elsewhere in this specification so that the system comes on-line fully automatically, and on restoration of utility power automatically re-transfers load to normal power, shuts down the generator and returns to readiness for another operating cycle.

REQUIREMENTS OF REGULATORY AGENCIES

An electric generating system, consisting of a prime mover, generator, governor, coupling and all controls, must have been tested, as a complete unit, on a representative engineering prototype of the equipment to be sold.

Conform to N.E.C. and NFPA-110 Level One Code requirements and applicable local inspection authorities.

Transfer switch to be labeled under UL 1008.

MANUFACTURER QUALIFICATIONS

This system shall be supplied by Kohler, Generac, Onan, etc., or of similar quality or an approved equal who has been regularly engaged in the production of engine-alternator sets, automatic transfer switches, and associated controls for a minimum of fifteen years, thereby identifying one source of supply and responsibility.

To be classified as a manufacturer, the builder of the generator set must manufacture, at minimum, engines or alternators.

The manufacturer shall have printed literature and brochures describing the standard series specified, not a one of a kind fabrication.

ENGINE-GENERATOR-SET

Engine

The prime mover shall be a liquid cooled, dual-fueled with primary natural gas and backup LP Vapor fuel, naturally aspirated engine of 4-cycle design. It will have a V-6 cylinder block with a minimum displacement of 4.3 liters (263 cubic inches), with a minimum rating of 80 **BHP**. The unit requires a minimum rated output of 40.0kW on Natural gas fuel at an operating speed of 1800 RPM.

The engine is to be cooled with a unit mounted radiator, fan, water pump, and closed coolant recovery system providing visual diagnostic means to determine if the system is operating with a normal engine coolant level. The radiator shall be designed for operation in 110 degrees Fahrenheit, 43 degrees Celsius ambient temperature.

The intake air filter with replaceable element must be mounted on the unit. Full pressure lubrication shall be supplied by a positive displacement lube oil pump. The engine shall have a replaceable oil filter with internal bypass and replaceable elements. Engine coolant and oil drain extensions must be provided to outside of the mounting base for cleaner and more convenient engine servicing. A fan guard must be installed for personnel safety.

The engine shall have a battery charging DC alternator with a transistorized voltage regulator. Remote 2-wire starting shall be by a solenoid shift, electric starter.

Engine speed shall be governed by electronic governor to maintain alternator frequency within .5% from no load to full load alternator output. Steady state regulation is to be 0.25%.

The engine fuel system shall be designed for primary operation on natural gas having a BTU content of 1,000 BTU per cubic foot delivered to the unit in a vapor state. LP Vapor secondary fuel supply is also required. A carburetor, secondary regulator, fuel lock-off solenoid and all piping must be installed at the point of manufacturing, terminating at a single pipe opening external to the mounting base.

Sensing elements to be located on the engine for low oil pressure shutdown, high coolant temperature shutdown, low coolant level shutdown, overspeed shutdown and overcrank shutdown. These sensors are to be connected to the control panel using a wiring harness with the following features: wire number labeling on each end of the wire run for easy identification, a molded rubber boot to cover the electrical connection on each sensor to prevent corrosion and all wiring to be run in flexible conduit for protection from the environment and any moving objects.

Provide the following items installed at the factory:

The unit will accept LPG in Vapor form as a secondary source of fuel. The changeover from primary fuel to secondary fuel must be automatic and allow uninterrupted engine operation.

Provide a thermostatically controlled blanket type battery heater to increase engine battery capacity for cold weather starting.

Provide an automatic dual rate battery charger manufactured by the engine-generator set supplier. The automatic equalizer system shall monitor and limit the charge current to 10 amps. The output voltage is to be determined by the charge current rate. The charger must have a maximum open

circuit voltage of 35 volts and be protected against a reverse polarity connection. The battery charger is to be factory installed on the generator set. Due to line voltage drop concerns, a battery charger mounted in the transfer switch will be unacceptable. Charger alarms are required.

Provide a radiator discharge duct.

A heavy duty, lead acid battery set shall be provided by the generator set manufacturer of adequate voltage and amperage capacity to start and operate the engine. Provide all intercell and connecting battery cables as required.

The manufacturer shall supply its recommended stainless steel, flexible connector to couple the engine exhaust manifold to the exhaust system.

The engine shall have a unit mounted, thermostatically controlled water jacket heater to aid in quick starting. It will be of adequate wattage as recommended by the engine manufacturer. The contractor shall provide proper branch circuit from normal utility power source.

The following equipment is to be provided by the engine-generator set manufacturer and shipped loose with the unit:

The manufacturer will supply its recommended flexible fuel line to connect the engine to the external fuel source. On stationary applications the fuel line shall match the fuel fitting on the unit base rail and have braided stainless steel covering with brass fittings.

Alternator

The alternator shall be a 4-pole revolving field type, 12 lead, wired for 120/208 VAC, three phase, 60 Hz upsized to 80 kW, 164 SKVA @ 208VAC 3-Phase with a brushless PMG exciter. Photosensitive components will not be permitted in the rotating exciter. The stator shall be direct connected to the engine to insure permanent alignment. The generator shall meet temperature rise standards for Class "H" insulation, operate within Class "F" standards for extended life. All leads must be extended into an AC connection panel. The alternator shall be protected by internal thermal overload protection and an automatic reset field circuit breaker.

One step load acceptance shall be 100% of nameplate rating and meet the requirements of NFPA 110 paragraph

The generator set and regulator must sustain at least 90% of rated voltage for 10 seconds with 250% of rated load at near zero power factor connected to its terminals when equipped with direct or brushless excitation. 300% short circuit current must be selectable on units equipped with permanent magnet exciters. Generators equipped with permanent magnet exciters not allowing the selection of the short circuit current ratings are not allowed.

A solid state voltage regulator designed and built by the engine-generator set manufacturer must be used to control output voltage by varying the exciter magnetic field to provide + or - 1% regulation during stable load conditions. Should an extremely heavy load drop the output frequency, the regulator shall have a voltage droop of 4 Volts/Hertz to maximize motor starting capability.

The frequency at which this droop operation begins must be adjustable, allowing the generator set to

be properly matched to the load characteristics insuring optimum system performance. Additional rheostats for matching generator voltage, droop, and stability characteristics to the specific load conditions must be available.

The voltage regulator must contain a limiting circuit to prevent output voltage surges in excess of 125% of rated voltage during generator set operation. On loss or near loss of the voltage sensing signal, the voltage regulator must be capable of shutting down to prevent an overvoltage condition from occurring. It must have a second mode of operation allowing 300% of rated current to flow through the electrical distribution circuit(s) for ten (10) seconds under the same conditions. Voltage regulators not capable of selecting either mode of operation are not acceptable. LED

indication will be provided on the regulator to monitor the sensing (yellow), excitation (green), and output circuit (red).

A NEMA 1 panel that is an integral part of the generator set must be provided to allow the installer a convenient location in which to make electrical output connections. An isolated neutral lug must be included by the generator set manufacturer to insure proper sizing.

The electric plant shall be mounted with vibration isolators on a welded steel base that shall permit suitable mounting to any level surface.

A thermal magnetic UL listed main line circuit breaker rated at 150 amps must be mounted in the AC connection panel. The line side connections are to be made at the factory. A system utilizing a manual reset field circuit breaker and current transformers is unacceptable.

Controls

All engine alternator controls and instrumentation shall be designed, built, wired, tested and shock mounted in a NEMA 1 enclosure to the engine-generator set by the manufacturer. It shall contain panel lighting, a fused DC circuit to protect the controls and a +/-5% voltage adjusting control. This panel must be able to be rotated 90 degrees in either direction for correct installation.

The engine-generator set shall contain a complete 2 wire automatic engine start-stop control which starts the engine on closing contacts and stop the engine on opening contacts. A cyclic cranking limiter shall be provided to open the starting circuit after eight attempts if the engine has not started within that time. Engine control modules must be solid state plug-in type for high reliability and easy service.

The panel shall include; analog meters to monitor AC voltage, AC current and AC frequency with a phase selector switch, an emergency stop switch, an audible alarm, battery charger fuse, and a programmable engine control and monitoring module.

The programmable module shall include: a manual, off, auto switch; four LEDs to indicate:

- 1) Not In Auto
- 2) Alarm Active
- 3) Generator Running
- 4) Generator Ready; a data entry keypad and a digital display panel.

The module will store and display all pertinent unit parameters including:

1 Generator Status

Current Unit status in real time.

2 Instrumentation

Real time readouts of the engine and alternator analog values

- * Oil pressure
- *Coolant temperature
- *Fuel level (where applicable)
- *DC battery voltage
- *Run time hours

3 Generator Commands

Current engine start/stop status

4 Alarm Status

Current alarm(s) condition provide senders for all of the following:

- High or Low AC voltage
- High or Low Battery Voltage
- High or Low Frequency
- Low or pre-low oil pressure
- Low Water Level
- Low Water Temperature
- High and pre-high engine temperature
- High, low and critical low fuel levels (where applicable)
- Overcrank
- Overspeed
- Unit not in “Automatic Mode”
 - *8 user programmable digital channels
 - *4 user programmable analog channels

5 Alarm Log

Memory of last fifty alarm events

6 Operating parameters

Access to and manipulation of the current operating parameters and alarm limits.

7 Software Information

Version information and module display test function

The panel must be accessible by PC based software via either standard RS232, RS485 or modem. The software must display the module face, be updated in real time and allow for complete access to all module functions. Communication output and its software must be fully compatible and allow for incorporation into an existing control program.

The following equipment is to be installed at the engine-generator set manufacturer's facility:

A DPDT run relay shall be socket mounted in the generator control panel and operate on engine start and run for customer connection.

The following equipment is to be provided by the engine-generator set manufacturer and shipped loose with the unit:

A gas pressure gauge with an appropriate scale shall be supplied by the manufacturer to monitor the gas supply pressure.

Provide an alarm annunciator panel for remote mounting with the following signals indicating status and possible malfunction. The annunciator must have the capability of programming the audible alarms as follows:

LAMP LEGEND	LIGHT	AUDIBLE
Pre-Alarm High Water Temperature	Yellow	Selectable
Pre-alarm Low Oil Pressure	Yellow	Selectable
High Coolant Temp/Low Coolant Level	Red	Yes
Low Oil Pressure	Red	Yes
Low Coolant Temperature	Yellow	Selectable
Low Fuel	Yellow	Selectable
High Battery Voltage	Yellow	No
Not In Auto	Red	Yes
RPM Sensor Loss	Red	Yes
Over speed	Red	Yes
Low Battery Voltage	Yellow	Yes
Overcrank	Red	Yes
Generator Power	Yellow	No
Normal Utility Power	Green	No
System Ready	Green	No
Alarm Switch Off	Red	No
Generator Running	Yellow	No
Battery Charger Failure	Yellow	Selectable
Emergency Stop	Red	Yes
Communications OK	Green	Yes

The panel shall have an ALARM switch that when moved to the OFF position silences the audible alarm. A TEST/RESET switch must be included to verify the lights are functional and reset any condition after it has cleared. The remote annunciator shall have a factory installed switch with the capability of starting, and stopping the standby generator set from the annunciator panel.

Unit Accessories

Weather protective enclosure: The engine-generator set shall be factory enclosed in a heavy gauge steel enclosure constructed with 12 gauge corner posts, uprights and headers. The roof shall aid in the runoff of water and include a drip edge. The enclosure shall be coated with electrostatically applied power paint, baked and finished to manufacturers specifications. The enclosure is to have large, hinged doors to allow access to the engine, alternator and control panel. The doors must lift off without the use of tools. Each door will have recessed lockable hardware with identical keys. Padlocks do not meet this specification. Enclosure hardware for handles and hinges are to be stainless steel.

Factory installed vertical radiator discharge duct with screened top is to be provided, maintaining factory electrostatically applied, baked on powder coat paint system. Rodent guards and skid sealing plates are to be provided. Oil and Antifreeze drain extensions to edge of enclosure are to be provided for the unit.

Exhaust silencer(s) shall be provided of the size as recommended by the manufacturer and shall be of critical grade. The silencer(s) shall be mounted within the weather protective enclosure with solid brackets. It shall be connected to the engine with a flexible, seamless, stainless steel exhaust connection. A rain cap will terminate the exhaust pipe. All components must be properly sized to assure operation without excessive backpressure when installed. Exhaust "doghouse" is not acceptable unless silencer is fully enclosed & factory paint system is maintained.

Automatic Transfer Switch

GENERAL

The automatic transfer switch shall be furnished by the manufacturer of the engine-generator set so as to maintain system compatibility and local service responsibility for the complete emergency power system. It shall be listed by Underwriter's Laboratory, Standard 1008 with circuit breaker protection. Representative production samples of the transfer switch supplied shall have demonstrated through tests the ability to withstand at least 10,000 mechanical operation cycles. One operation cycle is the electrically operated transfer from normal to emergency and back to normal. Wiring must comply with NEC table 373-6(b). The manufacturer shall furnish schematic and wiring diagrams for the particular automatic transfer switch and a typical wiring diagram for the entire system.

RATINGS & PERFORMANCE

The automatic transfer switch shall be a 3 pole design rated for 150 amperes continuous operation in ambient temperatures of -20 Degrees Fahrenheit (-30 Degrees Celsius) to +140 Degrees Fahrenheit (+60 Degrees Celsius). Main power switch contacts shall be rated for 600 Volt AC, minimum. The transfer switch supplied shall have a minimum withstand and closing rating when fuse protected of 200,000 amperes. Where the line side overcurrent protection is provided by circuit breakers, the short circuit withstand and closing ratings shall be 25,000 amperes RMS. These RMS symmetrical fault current ratings shall be the rating listed in the UL listing or component recognition procedures for the transfer switch. All withstand tests shall be performed with the overcurrent protective devices located external to the transfer switch.

CONSTRUCTION

The transfer switch shall be double throw construction, positively electrically and mechanically interlocked to prevent simultaneous closing and mechanically held in both normal and emergency positions. Independent break before make action shall be used to positively prevent dangerous source to source connections. When switching the neutral, this action prevents the objectionable ground currents and nuisance ground fault tripping that can result from overlapping designs. The transfer switch shall be approved for manual operation. The electrical operating means shall be by electric solenoid. Every portion of the contactor is to be positively mechanically connected. No clutch or friction drive mechanism is allowed, and parts are to be kept to a minimum. This

transfer switch shall not contain integral overcurrent devices in the main power circuit, including molded case circuit breakers or fuses.

The transfer switch electrical actuator shall have an independent disconnect means to disable the electrical operation during manual switching. Maximum electrical transfer time in either direction shall be 160 milliseconds, exclusive of time delays. Main switch contacts shall be high pressure silver alloy contacts to resist burning and pitting for long life operation.

There shall be two SPDT, 10 ampere, 250 volt auxiliary switches on both normal and emergency sides, operated by the transfer switch. Full rated neutral bar with lugs for normal, emergency and load conductors shall be provided inside the cabinet.

CONTROLS

A solid state undervoltage sensor shall monitor all phases of the normal source and provide adjustable ranges for field adjustments for specific application needs. Pick-up and drop-out settings shall be adjustable from a minimum of 70% to a maximum of 95% of nominal voltage. A utility sensing interface shall be used, stepping down line voltage to 24VAC, helping to protect the printed circuit board from voltage spikes and increasing personnel safety when troubleshooting.

Signal the engine-generator set to start in the event of a power interruption. A set of contacts shall close to start the engine and open for engine shutdown. A solid state time delay start (adjustable, .1 to 10 seconds) shall delay this signal to avoid nuisance start-ups on momentary voltage dips or power outages.

Transfer the load to the engine-generator set after it reached proper voltage and frequency. A solid state time delay (adjustable, 5 seconds-3 minutes) shall delay this transfer to allow the engine-generator to warm-up before application of load. There shall be a switch to bypass this warm-up timer when immediate transfer is required.

Retransfer the load to the line after normal power restoration. A return to utility timer (adjustable, 1-30 minutes) shall delay this transfer to avoid short term normal power restoration.

The operating power for transfer and retransfer shall be obtained from the source to which the load is being transferred. Controls shall provide an automatic retransfer of the load from emergency to normal if the emergency source fails with the normal source available.

Signal the engine-generator to stop after the load retransfers to normal. A solid state engine cooldown timer (adjustable, 1-30 minutes) shall permit the engine to run unloaded to cooldown before shutdown.

Provide an engine minimum run timer (adjustable, 5-30 minutes) to ensure an adequate engine run period.

Provide a solid state plant exercise clock to start the generator set exercise period. Clock shall have a one week cycle and be powered by the load side of the transfer switch. A battery must be supplied to maintain the circuit board clock operation when the load side of the transfer switch is de-energized. Include a switch to select if the load will transfer to the engine-generator set during the exercise period.

Control shall include a digital display interface enabling the operator to establish unit exercise time within a twenty four hour period. Additional switch settings enable any combination of days within a week for unit exercise. This control is completely self-contained, eliminating the need for the operator to handle pins and jumper wires.

The transfer switch shall have a time delay neutral feature to provide a time delay (adjustable, 1-10 seconds) during the transfer in either direction, during which time the load is isolated from both power sources. This allows residual voltage components of motors or other inductive loads (such as transformers) to decay before completing the switching cycle. A switch will be provided to bypass all transition features when immediate transfer is required.

The transfer switch shall have an inphase monitor which allows the switch to transfer between live sources if their voltage waveforms become synchronous within 20 electrical degrees within 10 seconds of transfer initiation signal. A switch must be provided to bypass this feature if not required.

If the inphase monitor will not allow such a transfer, the control must default to time delay neutral operation. Switches with inphase monitors which do not default to time delay neutral operation are not acceptable.

Front mounted controls shall include a selector switch to provide for a NORMAL TEST mode with full use of time delays, FAST TEST mode which bypasses all time delays to allow for testing the entire system in less than one minute, or AUTOMATIC mode to set the system for normal operation.

Provide bright lamps to indicate the transfer switch position in either UTILITY (white) or EMERGENCY (red). A third lamp is needed to indicate STANDBY OPERATING (amber). These lights must be energized from utility or the engine-generator set.

Provide manual operating handle to allow for manual transfer. This handle must be mounted inside the lockable enclosure so accessible only by authorized personnel.

Provide a safety disconnect switch to prevent load transfer and automatic engine start while performing maintenance. This switch will also be used for manual transfer switch operation.

Provide LED status lights to give a visual readout of the operating sequence. This shall include utility on, engine warm-up, engine warm-up bypass, standby voltage "ready", standby frequency "ready", standby on, transfer to standby, in-phase monitor, time delay neutral, return to utility, engine cool-down, engine minimum run and fast test mode.

MISCELLANEOUS TRANSFER SWITCH EQUIPMENT

The transfer switch mechanism and controls are to be mounted in a NEMA 1 enclosure.

The following options are to be provided by the transfer switch manufacturer.

A manual bypass for return to normal push button. This option will prevent the re-transfer of the load back to utility until the operator actuates this push button.

UNIT OPTIONS

FACTORY TESTING

Before shipment of the equipment, the engine-generator set shall be tested under rated load for performance and proper functioning of control and interfacing circuits. Tests shall include:

1. Verifying all safety shutdowns are functioning properly.
2. Single step load pick-up per NFPA 110-1996, Paragraph 513.2.6.
3. Transient and voltage dip responses and steady state voltage and speed (frequency) checks.

OWNER'S MANUALS

Two (2) sets of owner's manuals specific to the product supplied must accompany delivery of the equipment. General operating instruction, preventive maintenance, wiring diagrams, schematics and parts exploded views specific to this model must be included.

INSTALLATION

Contractor shall install the complete electrical generating system including all fuel connections in accordance with the manufacturer's recommendations as reviewed by the Engineer.

SERVICE

Supplier of the electric plant and associated items shall have permanent service facilities within 150 miles of the project site. These facilities shall comprise a permanent force of factory trained service personnel on 24 hour call, experienced in servicing this type of equipment, providing warranty and routine maintenance service to afford the owner

maximum protection. Delegation of this service responsibility for any of the equipment listed herein will not be considered fulfillment of these specifications. Service contracts shall also be available.

WARRANTY

The standby electric generating system components, complete engine-generator and instrumentation panel shall be warranted by the manufacturer against defective materials and factory workmanship for a period of 12 months. Such defective parts shall be repaired or replaced at the manufacturer's option, free of charge for travel and labor. The warranty period shall 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.

STARTUP AND CHECKOUT

The supplier of the electric generating plant and associated items covered herein shall provide factory trained technicians to checkout the completed installation and to perform an initial startup inspection to include:

- Ensuring the engine starts (both hot and cold) within the specified time.
- Verification of engine parameters within specification.
- Set no load frequency and voltage.
- Test all automatic shutdowns of the engine-generator.
- Perform a load bank test of the electric plant to comply with NFPA-110, ensuring full load frequency and voltage are within specification.

SUBMITTALS

Provide seven complete sets of Engineering Submittal for approval, prior to production release, showing all components, in addition to the engine and generator. Submittals shall include compliance with these specifications.

SUBSTITUTIONS

The emergency power system has been designed to the specified manufacturer's electrical and physical characteristics. The equipment sizing, spacing, amounts, electrical wiring, ventilation equipment, fuel and exhaust components have all been sized and designed around GENERAC equipment. Should any substitutions be made, the contractor shall bear responsibility for the installation, coordination and operation of the system as well as any engineering and redesign costs which may result from such substitutions. Alternate equipment suppliers shall furnish equipment submittals 14 days prior to bid date for approval to bid. As part of the submittals, the substitute manufacturer shall supply as a minimum engine, alternator and control panel wiring diagrams and schematics. A separate list of all printed circuit boards with part numbers and current pricing must also be included.

PRICED ALTERNATE FOR SOUND-ATTENUATED ENCLOSURE

Provide a priced alternate to furnish generator set package in a factory sound-attenuated enclosure. Alternate sound-attenuated enclosure must be a standard factory design, which has been fully prototype-tested. Sound-attenuated enclosure to be manufactured and assembled by generator manufacturer, with standard published descriptive literature and attenuation data. Sound-attenuated enclosure shall meet all other requirements as listed for standard enclosure.

B. DOCUMENTATION

The generator installation shall be supported by complete documentation. This shall include Installation, Technical and Operational manuals. Clear labeling of any hazards shall be completed. Manuals shall be in notebooks.

C. MAINTENANCE

Each proposal shall include pricing for a Spring and Fall Preventative Maintenance Inspection, including (minimum) the following:

1. Change oil
2. Replace oil filter
3. Carefully inspect for rodent, bird, and etc. damage
4. Check battery, charger and related items
5. Check all wiring/ tighten connections
6. Clean interior and exterior of unit
7. Check conduits for deterioration
8. Test run for full cycle
9. Check effect of loading on the output
10. Provide complete typed report and log on-site

D. The final quotation must include charges for delivery, installation and training.

F. A detailed description and list of all electrical requirements must be included in your response to this RFQ.

G. Responses to this RFQ are required to include a timeline for installation.

H. Each firm responding to this RFQ is encouraged to conduct a site visit to achieve a full understanding of physical operating conditions prior to preparation and submission of a proposal. Site visits may be arranged through the Chippewa County Office of Emergency Services by calling (906) 495-7488.

I. Proposals must provide sufficient information to allow a determination that the specified requirements can be met.

III. DETERMINATION OF THE BEST BID.

A. Any purchase resulting from this RFQ will be made from respondent whose bid is most advantageous to the County. In determining which bid is most advantageous and/or best, the County will consider:

1. the ability, capacity and skill of the respondent to provide the item/services required.
2. whether the bidder can fulfill the purchase and provide service promptly without delay or interference.
3. the character, integrity, reputation, judgment, experience and efficiency of the bidder.
4. the quality of performance of previous engagements with the bidder.
5. previous and existing compliance by the bidder with applicable laws and ordinances.
6. the sufficiency of the financial resources and ability of the bidder to provide the requested product / services.

7. the number and scope of conditions attached to the bid.
 8. any potential conflicts of interest between bidders and the County governing body and staff.
- B. If all bids received are reasonably equivalent other than with respect to cost, bidders whose business is located within Chippewa County will be given preference as follows:
1. If bids are taken for items or services for a cost between \$250 and \$2,500, the bid of the Chippewa County vendor may not exceed the lowest bid by more than 5.0%.
 2. For bids exceeding \$2,500, the bid of the Chippewa County vendor must not exceed the lowest bid by more than 3.0%.

IV. BID AWARD

Selection of a firm and awarding of a contract will be based upon evaluation by the County of the criteria listed above.



**CHIPPEWA COUNTY
GENERATOR PROJECT
BID SUBMISSION FORM**

Firm/Individual Name _____

Address _____ Phone (_____) _____

Description	Price
TOTAL BID PRICE	\$

A list of any other applicable costs must accompany the submitted bid.

Signature of official authorized to bind the firm to the provisions of the RFQ:

Signature: _____ Date _____

Typed or printed name and title:

**Failure to complete this form may result in elimination from the selection process.
Proposals must be received on or before 4:00 p.m. Thursday August 1, 2024 to be considered.**