ST. TAMMANY PARISH

MICHAEL B. COOPER
PARISH PRESIDENT

May 24, 2024

Please find the following addendum to the below-mentioned BID.

Addendum No.: 2

Bid#: 24-15-2

Project Name: Meadow Lake & River Oaks New Elevated Storage Tanks

Bid Due Date: **June 5, 2024**

Receipt of this addendum shall be acknowledged by inserting its number and date in the space provided on the Proposal.

GENERAL INFORMATION:

1. Bid due date is delayed to Wednesday, June 5, 2024. Time and location remain the same. The inquiry deadline is Friday, May 24, 2024. The Addendum Deadline is Friday May 31, 2024.

DRAWINGS:

1. Drawing Sheet 14:
   - **a.** Modify Note 4 as follows," …. Contractor shall re-tap up to ~~7~~ **14** days after initial driving…."
   - **b.** Add Note 6 as follows, "Table of Allowable Single Pile Load Capacity is reported with factor of safety = 2.0; Contractor's engineer shall convert tabulated values to ultimate capacity for design, and use factors of safety specified in AWWA D100-

SPECIFICATIONS

1. Section 13300, Systems Integration
   a. Delete Para 1.1 (D) 4 (f).
   b. Modify Para 1.1 (D) 4 (g) as follows, "Perform factory tests on panels. **Control Panel CP-101 shall be functionally tested by Owner's integrator at panel**

builder factory, at Contractor Cost. Include cost shown in Appendix B for this service."

c. Add Para 1.1 (D) 7 as follows, "PLC programming in CP-101 and SCADA integration shall be by Owner's Integrator, at Owner cost. Coordination and cooperation with Owner's Integrator is required as part of the scope of work."
d. Delete Para 1.5 (D).

2. Section 02860, Ground Storage Tank
   a. Delete Para 1.2.4.
3. Section 11350, Horizontal Split Case Pumps
   a. Delete this section and Replace with: "11350 – Horizontal Split Case Pumps – Addendum No. 2".
4. Appendix B
   a. Add: Appendix B. – Factory Acceptance Testing (FAT) & Gateway/Switch Configuration Services.

PRIOR APPROVAL REQUESTS

1. Emergency Generators – Specification Section 16230. Request to allow Generac Industrial Power to be considered as an equal to the specified Cummins Power Generation generators. Request approved.

ATTACHMENTS:

Specification Section 11350 - "Horizontal Split Case Pumps – Addendum No. 2".

Generac Industrial Power Specification Sheet – Prior Approval

Appendix B – Factory Acceptance Testing (FAT) & Gateway/ Switch Configuration Services

<< End of Addendum 2 >>

SECTION 11350 - HORIZONTAL SPLIT CASE PUMPS
Addendum No. 2

PART 1 GENERAL

1.01 SCOPE OF WORK

A. The Contractor shall furnish all labor, materials, equipment, and incidentals required to install, place in operation, and field test two (2) horizontal split case pumps, motors, and accessories, as specified herein. The pumps and motors shall be provided by an authorized representative of the pump manufacturer for system responsibility.

B. This Section is intended to give a general description of what is required but does not cover all the details which will vary in accordance with the requirements of the equipment application. It is, however, intended to cover the furnishing, shop testing, delivery, and complete installation and field testing, of all materials, equipment, and appurtenances for the complete pumping units as herein specified, whether specifically mentioned in this Section or elsewhere.

1.02 RELATED WORK

A. Yard piping, valves, and appurtenances shall be included within Division 2 and 15.

B. Concrete construction for pump/motor support structures and anchor bolt installation shall be included within Division 3. Anchor bolts shall be furnished, under this Section, by the Contractor.

C. Painting, except as specified herein, shall be included within Section 09800.

D. Process Instrumentation shall be included within Division 16.

E. Mechanical piping, valves, pipe hangers, and supports shall be included within Division 15.

F. Electrical installation, wiring, and motors shall be included within Division 16.

1.03 SYSTEM DESCRIPTION

A. Two (2) pumping units shall be required, as specified herein, to construct the proposed high service pump station. The pumping units shall be located and arranged as shown on the Drawings. Field placement shall be coordinated with the Engineer prior to the initiation of work.

B. The pumping units shall take suction from the new ground storage tank and discharge to the distribution system. Pump discharge shall be controlled by pressure variations within

the distribution system. In addition, the pumps will turn off when the water surface in the ground storage tank drops to a set level.

1.04 QUALIFICATIONS

A. To assure unity of responsibility, the proper selection of pump and motor shall be coordinated by and between the pump and controls manufacturer. The Contractor shall assume full responsibility for the satisfactory installation and operation of the entire pumping system including pumps, motors, and controls as specified.

B. The equipment covered by this Section is intended to be standard units of proven ability as manufactured by a competent organization having long experience in the production of such equipment. A single manufacturer shall furnish all units specified herein. The pumps furnished shall be designed, constructed, installed, and tested in accordance with the best practice and methods, and shall operate satisfactorily, when installed. Pumps shall be manufactured in accordance with the Hydraulic Institute Standards, except where otherwise specified herein.

C. All equipment furnished under this Section shall be new, unused, and shall be the standard product of manufacturers having a successful record of manufacturing horizontal split case pumps and servicing the equipment, specified herein, for a minimum of fifteen (15) years and 500 units. Certified pump tests are required for each pumping unit - see Paragraph 3.02 of this section.

1.05 SUBMITTALS

A. Copies of all materials required to establish compliance with this Section shall be submitted in accordance with Section 01300. Submittals shall include, but are not limited to, the following:

1. Certified shop drawings showing all-important details of proposed equipment including construction, dimensions, installation instructions, and anchor bolt locations,

2. Descriptive literature, bulletins, and/or catalogs of the equipment,

3. Data on the characteristics and performance of each pump. Data shall include guaranteed performance curves, based on actual shop tests of similar units, which show that they meet the specified requirements for head, capacity, efficiency, NPSHR, and horsepower. Curves shall be submitted on 8-1/2-inch by 11-inch sheets; at as large a scale as is practical. Curves shall be plotted from no flow at shut off head to pump capacity at minimum specified total head. Catalog sheets showing a family of curves will not be acceptable. The minimum head system curve shall also be plotted on the submittal,

4. Provide motor wiring diagrams,

5. The total weight of the equipment including the weight of the single largest item,

6. Complete motor data, and

7. Copies of all factory test results, as specified within this Section.

B. Design Data

1. Complete motor performance data shall be furnished.

C. Operation and Maintenance Data

1. Complete operating and maintenance instructions shall be furnished for all equipment included under this Section. The maintenance instructions shall include troubleshooting data, full preventative maintenance schedules, and complete spare parts lists with the required ordering information.

D. In the event, it is impossible to conform to certain details of this Section, due to different manufacturing techniques, describe completely all non-conforming aspects.

E. The submittal format shall be in the form of a booklet; suitably tabbed and divided to cover all areas noted above for each equipment item to be installed. The submittal booklet shall include adequate detail and information for the Engineer to determine that all of the proposed equipment meets the requirements specified herein. Incomplete or partial submittals will not be reviewed.

1.06 OPERATING INSTRUCTIONS

A. Operating and maintenance manuals shall be furnished by the pump manufacturer. The manuals shall be prepared specifically for this installation and shall include all required cuts, drawings, equipment lists, descriptions, etc. that are required to instruct proper operation and maintenance of the proposed equipment. The requirements shall be as specified in Section 01730.

B. A factory representative of all major component manufacturers, who has complete knowledge of proper operation and maintenance, shall be provided for two (2) days to instruct representatives of the Owner on proper operation and maintenance. With the Owner's permission, this work may be conducted in conjunction with the inspection of the installation and field testing. If there are difficulties in the operation of the equipment due to the manufacturer’s design or fabrication, additional service shall be provided at no cost to the Owner.

1.07 TOOLS AND SPARE PARTS

A. The pump manufacturer shall provide one (1) set of all special tools (if required) for normal operation and maintenance. All such tools shall be furnished in a suitable steel tool chest complete with lock and duplicate keys.

B. The pump manufacturer shall furnish spare parts for each component of the pumping units as specified herein.

C. Spare Parts shall be properly bound and labeled for easy identification without opening the packaging and suitably protected for long-term storage.

D. All working parts of the pumps, and motors, such as bearings, wearing rings, shaft, sleeves, etc., shall be standard dimensions built to limit gauges or formed to templates, such that parts will be interchangeable between like units and such that the Owner may, at any time in the future, obtain replacement and repair parts for those furnished in the original machines. All parts shall be properly stamped for identification and location to match the provided O&M Manuals.

1.08 PRODUCT HANDLING

A. All parts shall be properly protected so that no damage or deterioration will occur during a prolonged delay from the time of shipment until installation is completed and the units and equipment are ready for operation.

B. All equipment and parts must be properly protected against any damage during a prolonged storage period at the site.

C. Factory assembled parts and components shall not be dismantled for shipment unless permission is received in writing from the Engineer.

D. Finished surfaces of all exposed pump openings shall be protected by wooden blanks strongly built and securely bolted thereto.

E. Finished iron or steel surfaces not painted shall be properly protected to prevent rust.

F. After hydrostatic tests, all entrapped water shall be drained prior to shipment, and proper care shall be taken to protect parts from the entrance of water during shipment, storage, and handling.

G. Each box or package shall be properly marked to show its net weight in addition to its contents.

1.09 WARRANTY

A. All equipment supplied under this section shall be warranted for a period of one (1) year by the Contractor and the pump manufacturer. The warranty period shall commence on the date of Substantial Completion of the Project.

B. The equipment shall be warranted to be free from defects in workmanship, design, and materials. If any part of the equipment should fail during the warranty period, the equipment shall be replaced, and all units restored to service, at no expense to the Owner.

PART 2 PRODUCTS

2.01 GENERAL DESCRIPTION

A. The pumping units required under this Section shall be complete including pumps with proper alignment and balancing of the individual units. All parts shall be so designed and proportioned as to have liberal strength, stability, and stiffness and to be especially adapted for the service to be performed. Ample room for inspection, repairs and adjustment shall be provided.

B. All necessary anchor bolts, nuts and washers shall be furnished by the Contractor for installation by the Contractor. The anchor bolts, nuts and washers shall be 316 stainless steel. A molybdenum disulfide anti-seize agent shall be supplied for use with all stainless-steel bolts.

C. Stainless steel nameplates giving the name of the manufacturer, the rated capacity, head, speed, and all other pertinent data shall be attached to each pump, motor, starter, and control panel.

D. The pump shall be a single-stage centrifugal horizontal split case pump, Crane Weinman Pump Model 4L1B or prior approved equal. Prior approvals must be obtained in accordance with the Instructions to Bidders.

E. Pumps must meet the lead-free requirement as defined in the 2014 Reduction of Lead in Drinking Water Act. NSF 372 requirements.

2.02 MATERIALS OF CONSTRUCTION

Casing..... Cast Iron (ASTM A48)
Impeller..... Chlorine Resistant Alpha Nickel Aluminum Bronze (ASTM B62)
Shaft.....Carbon Steel (AISI C1045)
Shaft Sleeve.....Bronze (ASTM B62)
Case Wear Ring.....Bronze (ASTM B62)

2.03 CASING

The casing will be of the horizontal split case design. The casing shall have tapped and plugged holes for priming, vent and drain. Removal of the upper half of the casing must allow removal of the rotating element without disconnecting the suction or discharge piping. The lower half of the casing shall be furnished with cored passageways from the high-pressure area of the volute to each seal box for positive lubrication without the use of

external flushing lines. The bearing arms shall be cast integrally with the lower half of the casing to assure positive bearing alignment. In no case will bolt on bearing arms be acceptable. Each bearing arm will provide a reservoir area for accumulation of weepage from the stuffing box, and a drilled and tapped opening will be provided at the lower portion to allow piping by the Contractor to the nearest floor drain.

2.04 IMPELLER

The impeller shall be designed to give the characteristics outlined under "Performance". It shall be of the enclosed type, vacuum cast in one piece impeller. It shall be furnished all over, the exterior being turned, and the interior being furnished smoothly and cleaned of all burrs, trimmings, and irregularities. The impeller will be dynamically balanced. It shall be held securely to the shaft by a key of ample size and shall be locked in place by threaded shaft sleeves. Nickel Aluminum Bronze materials of construction.

2.05 SHAFT SLEEVES

The shaft sleeves shall be extended from the hub of the impeller, through the seal box area, and beyond the gland. They shall be sealed at the impeller hub by a Teflon coated steel gasket to prevent pumped liquid from contacting the shaft. They shall be threaded to hold them securely in place and designed so as to lock the impeller.

2.06 CASE WEARING RING

The pump casing shall be fitted with case wear rings to minimize abrasive and corrosive wear to the casing. The wear rings shall be of the radial type, shall have a shoulder machined around the circumference to match a machined shoulder in the casing to provide two sealing faces and to locate the rings in the casing. The rings shall be securely located from rotation by means of pins to the lower casing half.

2.07 STUFFING BOX

A stuffing box shall be provided on each side of the pump casing, designed with sufficient area for incorporation of a John Crane Type 1 mechanical seal.

2.08 SHAFT

The pump shaft shall be one-piece, finished and polished on all sections. The shaft shall be of ample strength and rigidity and the shortest practicable distance between bearings shall be used to keep deflection and vibration to a minimum. The maximum allowable deflection of the shaft is 0.002" at any point of operation on the pump curve.

2.09 BEARINGS

The pump shall be supplied with a single row inboard bearing primarily for radial loads and a double row outboard bearing primarily for thrust loads. Both bearings shall be re-

greaseable lubrication ball type, designed for 250,000 hours average life. Each bearing shall be mounted in a machined housing that is moisture and dust proof. The housing shall have registered fits to assure alignment, pinned to prevent rotation, and bolted to the bearing arms. Each housing shall be supplied with a grease fitting and a plugged relief port.

2.10 COUPLING

A flexible coupling shall be provided to connect the pump shaft to the motor shaft. The coupling shall be of an all-metal type with a flexible rubber insert. The entire rotating coupling element shall be enclosed by a coupling guard.

2.11 BASEPLATE

The pump and motor shall be mounted on a steel base plate. The base shall be sufficiently rigid to support the pump and motor without the use of additional support or members.

2.12 MOTOR

The motor shall be horizontal and in accordance with the latest NEMA standards, and shall have the following characteristics:

Enclosure.....TEFC
Number of Phases....Three
Cycles.....60 Hz.
Voltages.....230/460 Volt
Speed.....1775 RPM
Horsepower.....40

Each motor shall have a sufficient horsepower rating to operate the pump at any point on the pump's head-capacity curve without overloading the nameplate horsepower rating of the motor, regardless of service factor. The motor shall have a service factor of at least 1.15. The service factor is reserved for variations in voltage and frequency.

PART 3 PERFORMANCE

3.01 CONDITIONS OF SERVICE

The following conditions of service shall be strictly adhered to:
Number of Units 2
Type of Drive ..... inverter
Discharge Size, minimum .. 4 in
Suction Size, minimum ..... 5 in
Design Capacity ..... 500 US GPM
Design Head ..... 154 FT
Efficiency at Design minimum ....68 %

Secondary Condition
Design Capacity ..... 650 US GPM
Design Head ..... 120 FT
Efficiency at Design (minimum) ....66.5 %

3.02 FACTORY INSPECTION AND TESTS

A. Pumps

1. Each pump shall be witnessed tested in the manufacturer's shop, in accordance with the applicable test code requirements of the Hydraulic Institute and as specified herein. Testing shall be conducted to a minimum Grade 2B level. Pumps shall be tested with the actual motors furnished under this Section.

2. Preliminary testing of the pump and motor shall be done to ensure that all equipment is operating properly prior to testing.

3. Certified pump performance curves shall be submitted, including head, capacity, brake horsepower and pump efficiency for each pump supplied. Prior to conducting a pump test, notification of such test and a list of test equipment and test procedures shall be forwarded to the Engineer at least 10 working days before the scheduled test date. All testing required to determine acceptance of individual pumps and drives shall be witnessed by Engineer. All gauges and other test instruments shall be calibrated within 30 days of the scheduled test and certified calibration data shall be provided. All venturi flow meters shall be calibrated within 2 years of the scheduled test and certified calibration data shall be provided. The supplier will seal all instruments used during a scheduled test and immediately forward the instruments to an independent testing laboratory for certified calibration checks. The cost for calibration tests shall be included in the cost of the equipment.

4. A failure of the pump meeting the operating requirements specified for any reason shall be considered an incomplete test. Upon correction of the problem causing failure, the pump shall be retested. The retesting shall be included under this Contract at no additional cost to the Owner.

5. Each pump assembly shall be submitted in the shop to a hydrostatic test. The test pressure shall be not less than 100 psig. Under this test pressure, no parts shall show undue deflection or other defects. Any defects disclosed by this test shall be corrected only by methods accepted by the Engineer.

6. Four certified copies of all factory pump test data shall be furnished to the Engineer.

3.03 INSTALLATION

A. Inspect all concrete work to determine if all dimensions and elevations relating to these units are correct. Consult the Engineer before modifying any concrete work.

B. Obtain sufficient copies of manufacturer's installation instructions and have them on the jobsite prior to erection.

C. The Contractor shall install all equipment in exact accordance with the manufacturer's written instructions and as directed on site during inspection visits by the manufacturer's representative.

D. The Contractor shall insure that the pumps and motors are properly installed with no pipe strain transmitted to the pump casing.

E. Installation shall include furnishing the required oil and grease for initial operation. The grades of oil and grease shall be in accordance with the manufacturer's recommendations.

F. Deviations from the manufacturer's written or verbal instructions shall be subject to approval by the Engineer.

3.04 TESTING AND START-UP

A. The manufacturer shall furnish the services of a competent service engineer to inspect the final installation of the equipment and to place the equipment into initial operation. Service engineer shall calibrate and set the presence/absence detectors and discharge pressure switches.

B. Manufacturer's representative shall field verify that all equipment is functioning as designed and specified.

C. In the event any equipment or components fail or do not meet specifications, all necessary changes and corrections shall be made at no expense to the Owner. Should any equipment remain unable to meet the specifications, that equipment shall be removed and replaced at no additional cost to the Owner.

D. The manufacturer's representative shall instruct operating personnel in the proper care and maintenance of the equipment at the time that is placed in operation.

E. A minimum time of two (2) eight-hour days shall be included in the manufacturer's proposal and the Contractor's bid price for such service.

END OF SECTION

9424 N Interstate Dr., Baton Rouge, LA 70809
Ph (225)275-2722 Fax (877)706-2722
www.arcco.com
4704 Viking Dr., Bossier City, LA 71111
(318)507-3147
14336 Seaway Rd., Gulfport, MS 39503-4608
(877)706-2722
601 Bark St., Harvey, LA 70058
(504)539-4037

Monday, May 20, 2024

St. Tammany Parish Government
ATTN: BOB MOEINIAN
Procurement@stpgov.org CC: Bmoeinian@stpgov.org

Reference: MEADOW LAKE & RIVER OAKS ELEVATED STORAGE TANKS

Please accept this letter as request for prior approval of **Generac Industrial Power** Model SD150 and SD080 for the 150kW and 80 kW diesel generator set & Generac Model TX300and TX400 for the 225A and 400A ATS for the **Meadow Lake & River Oaks Elevated Storage Tanks** project.

ARCCO Power Systems is an authorized distributor of Generac Industrial Power for the state of Louisiana and has been in business for over 25 years.

ARCCO Power Systems provides service & parts 24/7 and we are firmly committed to providing the best possible support and service during the life cycle of this project.

We feel the Generac Industrial Power equipment submitted to you will meet or exceed all aspects of your specification.

Please let me know if you should have any questions or need any additional information.

Sincerely,

Jeremy Billings

Jeremy Billings
Business Development Manager
ARCCO Power Systems
9424 N. Interstate Drive
Baton Rouge, LA 70809
225.275.2722 Office
225.278.9847 Cell
jbillings@arcco.com

BILL OF MATERIALS

Quantity 1 - Generac Industrial SD150 diesel engine-driven generator set with turbocharged/aftercooled 6-cylinder 6.7L engine, consisting of the following features and accessories:

- Stationary Emergency-Standby rated
- **150 kW Rating, wired for 277/480 VAC Three Phase, 60 Hz**
- With Upsized 200kW Alternator
- Permanent Magnet Excitation
- UL2200
- EPA Certified
- SCAQMD
- Level 1 Acoustic Enclosure, Aluminum
    - Baked-On Powder Coat Finish
- 150 MPH Wind Load Certified
- 36" 693 Gallon Double-Wall UL142 Basetank
    - Mechanical fuel level indicator gauge
    - Electronic fuel level sender
- DSE G8601 Digital Genset Controller
    - Meets NFPA 99 and 110 requirements
    - Temp Range -30 to +50 deg C
    - UL6200
    - CE
    - High-Resolution 240 X 128 Pixel Display
        - Integral LCD Display Heater
        - IP65 (front)
        - Auto/Manual/Off key switch, Alarm Indication, Not in Auto Indication, audible alarm, emergency stop switch
    - Advanced PLC Functionality
    - 2 RS485 Ports, 2 USB Ports, 1 Ethernet Port, and 1 CANbus Port
    - Engine Sensors: Oil Pressure, Oil Temp, Coolant Temp and Level, Fuel Level/Pressure (where applicable), Engine Speed, DC Battery Voltage and Charge Current, Run-time Hours, Generator Voltages, Amps, Frequency, Power, Power Factor
        - Alarm Status: Low or High AC Voltage, Low or High Battery Voltage, Low or High Frequency, Pre-low or Low Oil Pressure, Pre-high or High Oil Temp, Low Water Level and Temp, Pre-high or High Engine Temp, High, Low, and Critical-low Fuel Level/Pressure (where applicable), Overcrank, Over and Under Speed, Unit Not in Automatic
        - Programmable I/O
        - Built-in PLC for special applications
    - Engine function monitoring and control:
        - Full range standby operation; programmable auto crank, Emergency Stop, Auto-Off-Manual switch
    - Isochronous Governor
        - Digital frequency regulation with: soft-start ramping - adjustable, gain - adjustable, overshoot limit - adjustable
    - 3 Phase RMS Voltage Sensing

        - +/-0.5% digital voltage regulation with: soft-start voltage ramping - adjustable, loss of sensing protection - adjustable, negative power limit - adjustable, Hi/Lo voltage limit - adjustable, V/F slope and gain - adjustable, fault protection (I2T Function)
    - Configurable Timers
    - Integrated SNMP
    - DSENet (Expansion Support)
    - 2 and 3-wire start controls for any industrial grade transfer switch
- DSE G8601 Digital Genset Controller
    - Meets NFPA 99 and 110 requirements
    - Temp Range -30 to +50 deg C
    - UL6200
    - CE
    - High-Resolution 240 X 128 Pixel Display
        - Integral LCD Display Heater
        - IP65 (front)
        - Auto/Manual/Off key switch, Alarm Indication, Not in Auto Indication, audible alarm, emergency stop switch
    - Advanced PLC Functionality
    - 2 RS485 Ports, 2 USB Ports, 1 Ethernet Port, and 1 CANbus Port
    - Engine Sensors: Oil Pressure, Oil Temp, Coolant Temp and Level, Fuel Level/Pressure (where applicable), Engine Speed, DC Battery Voltage and Charge Current, Run-time Hours, Generator Voltages, Amps, Frequency, Power, Power Factor
        - Alarm Status: Low or High AC Voltage, Low or High Battery Voltage, Low or High Frequency, Pre-low or Low Oil Pressure, Pre-high or High Oil Temp, Low Water Level and Temp, Pre-high or High Engine Temp, High, Low, and Critical-low Fuel Level/Pressure (where applicable), Overcrank, Over and Under Speed, Unit Not in Automatic
        - Programmable I/O
        - Built-in PLC for special applications
    - Engine function monitoring and control:
        - Full range standby operation; programmable auto crank, Emergency Stop, Auto-Off-Manual switch
    - Isochronous Governor
        - Digital frequency regulation with: soft-start ramping - adjustable, gain - adjustable, overshoot limit - adjustable
    - 3 Phase RMS Voltage Sensing
        - +/-0.5% digital voltage regulation with: soft-start voltage ramping - adjustable, loss of sensing protection - adjustable, negative power limit - adjustable, Hi/Lo voltage limit - adjustable, V/F slope and gain - adjustable, fault protection (I2T Function)
    - Configurable Timers
    - Integrated SNMP
    - DSENet (Expansion Support)
    - 2 and 3-wire start controls for any industrial grade transfer switch
- 21 Light Remote Annunciator, Surface Mount
- Remote Emergency Stop Switch, Break-Glass, shipped loose
- Primary MLCB, 80% rated thermal-magnetic

    - 225 amp
- Alternator Strip Heater
- Alternator Tropical Coating
- Battery Charger, 10 Amp, NFPA 110 compliant, installed
- 110 AH, 925 CCA Group 31 Batteries, dual-paralleled, with rack, installed
- Engine Coolant Heater, 1500W
- Engine Run Relay, 10A
- Flush Mount Annunciator Kit
- 3 Owner's Manuals
- Standard 2-Year Limited Warranty

Quantity 1 - Generac Industrial diesel engine-driven generator set with turbocharged 4-cylinder 4.5L engine, consisting of the following features and accessories:

- Stationary Emergency-Standby rated
- **80 kW Rating, wired for 277/480 VAC three phase, 60 Hz**
- Permanent Magnet Excitation
- With upsized 100 kW alternator
- UL2200
- EPA Certified
- SCAQMD
- Level 1 Acoustic Enclosure, Aluminum
    - Industrial Grey Baked-On Powder Coat Finish
- 150 MPH Wind Load Certified
- 36" 305 Gallon Double-Wall UL142 Basetank
    - Mechanical fuel level indicator gauge
    - Electronic fuel level sender
    - Emergency Vents
- Power Zone 410 Digital Control Panel for Single Generators
    - NFPA 110 Capable
    - Temp Range -40 to 70 degrees C
    - UL6200
    - C-ETL-US
    - CE
    - 128 X 64 Graphical Display with Heater
        - Auto/Manual/Off modes
        - Optional Emergency Stop, key switch (Auto/Off/Manual) and audible alarm horn within a single add on module
        - RS-485, RS-232 and CANbus ports
        - Sensors: Oil Pressure, optional Oil Temp, Coolant Temp, Fuel Level/Pressure (where applicable), Engine Speed, DC Battery Voltage, Run-time Hours, Generator Voltages, Amps, Frequency, Power, Power Factor
        - Alarm Status: Low or High AC Voltage, Low or High Battery Voltage, Low or High Frequency, Pre-low or Low Oil Pressure, Pre-high or High Oil Temp (optional), Low Water Level and Temp, High, Low, and Critical-low Fuel Level/Pressure (where applicable), Overload, Overcrank, Over and Under Speed, Unit Not in Automatic

        - Optional Programmable I/O module
    - Engine function monitoring and control:
        - Full range standby operation; programmable auto crank, Emergency Stop (optional), Auto-Off-Manual
        - 3 Phase RMS Voltage Sensing
            - +/-0.5% digital voltage regulation with: soft-start voltage ramping - adjustable, loss of sensing protection - adjustable, negative power limit - adjustable, Hi/Lo voltage limit - adjustable, V/F slope and gain - adjustable, fault protection
    - Service reminders, fault history (alarm log)
    - I2T function for full generator protection
    - Selectable low-speed exercise
    - 2 and 3-wire start controls for any 2 or 3-wire transfer switch
- 21 Light Remote Annunciator
- Remote Emergency Stop Switch, Break-Glass, shipped loose
- Primary MLCB, 80% rated thermal-magnetic
    - 125 Amp
- 5 Amp Battery Charger
- 110 AH, 925 CCA Group 31 Battery, with rack, installed
- Coolant Heater, 1500W, 120VAC
- Engine Run Relay, 10A
- Alternator Strip Heater
- Alternator Tropical Coating
- Flush Mount Annunciator Kit
- Fire Rated Stainless Steel Fuel Supply Hoses
- 3 Owner's Manuals
- Standard 2-Year Limited Warranty
- SD0080KG174.5D18DPSY3

Quantity 1 - TX Series Automatic Transfer Switch consisting of the following features and accessories:

- **300 Amp, 3 pole, 277/480 VAC three phase, 60 Hz, with 2-Wire Start Circuit**
    - Utility Voltage Sensing Controls:
        - Adjustable Drop-out and Pick-up
        - Adjustable Utility Interrupt Delay
    - Adjustable Logic Controls:
        - Minimum Standby Voltage
        - Minimum Standby Frequency
        - Engine Warmup
        - Return to Utility
        - Engine Cooldown
        - Transfer on Exercise
- 3 Owner's Manuals
- Double Set of Form C Aux Cont
- IBC Seismic Certified
- Any Breaker (3 Cycle)

- Withstand and Close-On Rating - 200kA Fuse Rating
- Withstand and Close-On Rating - 35kA Any Breaker
- Withstand and Close-On Rating - 65kA Specific Breaker
- Enclosure Heater
- CSA - C22.2 No.178
- UL Listed 1008 by ETL
- Controller Cover, Padlockable, Black
- NEMA 3R Enclosure
- Non Service Entrance Rated
- Any Breaker (3 Cycle)
- In Phase Only Transfer
- Five Year Extended Warranty

Quantity 1 - TX Series Automatic Transfer Switch consisting of the following features and accessories:

- **400 Amp, 3 pole, 277/480 VAC three phase, 60 Hz, with 2-Wire Start Circuit**
    - Utility Voltage Sensing Controls:
        - Adjustable Drop-out and Pick-up
        - Adjustable Utility Interrupt Delay
    - Adjustable Logic Controls:
        - Minimum Standby Voltage
        - Minimum Standby Frequency
        - Engine Warmup
        - Return to Utility
        - Engine Cooldown
        - Transfer on Exercise
- 3 Owner's Manuals
- Double Set of Form C Aux Cont
- IBC Seismic Certified
- Any Breaker (3 Cycle)
- Withstand and Close-On Rating - 200kA Fuse Rating
- Withstand and Close-On Rating - 35kA Any Breaker
- Withstand and Close-On Rating - 65kA Specific Breaker
- Enclosure Heater
- CSA - C22.2 No.178
- UL Listed 1008 by ETL
- Controller Cover, Padlockable, Black
- NEMA 3R Enclosure
- Non Service Entrance Rated
- Any Breaker (3 Cycle)
- In Phase Only Transfer
- Five Year Extended Warranty

TABLE OF CONTENTS

GENSET ELECTRICAL DRAWINGS

A0002056849	WD D4.5/6.7L G17 PZ410
A0002056850	SD D4.5/6.7L G17 PZ410
A0002863515	WD D6.7L G17 G86
A0004010170	SD D6.7L G17 G86

TRANSFER SWITCH ELEC DRAWINGS

A0000347533	SD TX SERIES 100-400A
A0000347534	WD TX SERIES 100-400A

SYSTEM INTERCONNECT DRAWINGS

A0001371118	INTERCONNECT DRAWING PZ 410
A0005034801	DSE G8601 INTERCONNECT DIAGRAM

OPTIONAL EQUIPMENT DRAWINGS

A0004734466	10A 12/24V BATT CHARGER SUBM

EMISSIONS DATA

0184820SSD	SOUND DATA SD080 4.5L
A0004998170	EMISSIONS SD080 D4.5L 2024
A0005031877	EMISSIONS SD150 6.7L DSE 2024

CERTIFICATIONS

0184520SSD	QUALITY CERTIFICATION DOC
0J4305	5YEAR EXTND WARR-TRNSFR SWITCH
0K3486	STANDARD 2B WARRANTY
0K8347	ISO CERTIFICATE 9001 : 20
A0005378527	RFPXL06.7DGB-007
A0005378528	RFPXL06.7DGS-001
EMSNWRNTY003	EPA WARRANTY STATEMENT US

SCOPE OF WORK

RED Group is pleased to present a proposal for FAT Testing (Factory Acceptance Testing) at the vendor's panel shop and gateway/switch configuration services which will be required prior to shipment of the panel to the jobsite. Gateway shall be configured remotely by RED Group staff ahead of the FAT test. Price includes time and expenses for up to 3 days for one Automation resource and assumes the vendor's UL listed panel shop is within 100 miles of the St Tammany Department of Utilities office.

PLC programing, SCADA integration, commissioning, and training are part of a separate contract and should be excluded by the panel vendor.

LUMP SUM PRICING

This proposal is provided on a Lump Sum basis.

ITEM	DESCRIPTION	QTY	PRICE	TOTAL
1	Professional Services	1	$9,835	$9,835
2	Mileage and Expenses	1	$613	$613
			TOTAL IN USD:	**$10,448.00**

LUMP SUM MILESTONE PAYMENT SCHEDULE

RED Group will invoice the Customer for the total price once services are completed and panel is deemed ready for shipment. Payment is due within 30 days of the date on the invoice. Late payments will be subject to penalties/interest fees.

NOTES AND TERMS

1. Pricing is valid for 30 days from the date listed on this proposal.
    a. If materials are included, material pricing will be validated at the time of material order due to supply chain volatility.
2. Price does not include sales tax. If the buyer does not provide an exemption certificate, or if the project is not exempt, sales taxes will be added to the material total invoices.
    a. Sales tax does not apply to service line items.
3. If client and RED Group have a fully executed MSA in place, Terms and Conditions in MSA will supersede Terms and Conditions in this proposal when conflicting.
4. Changes to the material BOMs and/or scope of work may require a change order.
5. All materials and services scope not included in this proposal are by others.
6. Pricing is in USD.
7. Expenses are included unless panel shop is further than 100 miles away from the DU office or the panel is not ready for testing due to panel vendor not building/wiring correctly and multiple trips are required.
8. This estimate is provided in the assumption that an agreement between 'X' Company and RED Group is reached. Terms and Conditions from the TBD agreement will be used for this proposal.
9. Lump Sum Payment Terms: NET 30

a. See section above in proposal

We appreciate this opportunity to provide support services for **Customer Name** and look forward to hearing from you on this opportunity.

Sincerely,

Jake Mattix
Partner & Director, Business Development
Mobile: 504-723-7518
Email jmattix@red.group