

Austin • Brownsville • Corpus Christi • Dallas • Edinburg • Ft Worth • Laredo • Longview • Pflugerville • San Antonio • Victoria • Waco

Regarding: City of Grand Prairie -

FS#6 Generator & ATS Replacement Sourcewell Member

Quote No: 30480410 v2

Date: 8/6/18

Quote Expires: 30 Days

# Caterpillar Model-C4.4 PGABR D100-8S Generator Set

**Power Setting** 

100 kW

Voltage

240/120 VAC, 1Ø, 60 Hz.

**Application Rating** 

Standby

**Engine** 

Caterpillar - 4.4L Diesel

Diesel Engine - Tier 3 Certified

Certification - UL2200

Engine Governor Cooling System

Isochronous, Electronic

GenSet Mounted 122°F/50°C Ambient

Engine Lube Oil & Antifreeze 50/50 Mix

**Engine Coolant Heater** 

Low Coolant Temperature and Level Alarm Switches

Coolant drain line with valve

Fan and belt guards

Caterpillar Extended Life Coolant

Coolant level sight gauge

Jacket water pump, gear driven, centrifugal

Thermostats and housing

Air Inlet System

Air Cleaner

Aftercooler

Turbocharger

**Lube System** 

Oil cooler

Lubricating oil

Oil filler and dipstick

Oil filter

Oil drain line with valve piped to edge of base

Fumes disposal piped to front of radiator

**Starting System** 

12 volt DC Electric Cranking Motor

Batteries, Battery Rack, & Cables

Battery Charger - 10amp

Charging System Exhaust System **Engine Driven Battery Charging Alternator** 

Carbon Steel

Critical Grade

Internally mounted

Stainless Steel Engine Exhaust Flex Connector

Exhaust manifold, dry Exhaust Rain Cap

Generator/Alternator & Attachments

4 Pole, Single Bearing

Excitation - 300% FLC PMG

2/3 pitch, random wound IP23 Protection

Class H insulation 130°C temperature rise over 40°C ambient Cable connections located inside generator

housing(NEMA compatible)

Power center, IP22 rear facing

Automatic Voltage Regulation - 3Ø Sensing

Anti-Condensation/Space Heater

Voltage Regulation

Integrated Voltage Regulation System (IVR)

Electronically controlled by the EMCP 4 through

the use of an excitation module.

Main Line Breaker

Circuit Breaker

GenSet Mtd.-

600 Amp

100% Rated w/ Shunt Trip & Auxiliary Contact

3 Pole

**Control Panel** 

Cable Lugs, Cable Access Box - Bottom Entry

Electronic Modular Control Panel - 4.2

Genset Mounted & Vibration Isolated

Emergency stop pushbutton Voltage adjust potentiometer

Speed adjustment Panel illuminating lights

Controls for:

Auto/start/stop

Speed and voltage adjust Engine cooldown timer Engine cycle crank Alarm acknowledge

Lamp test

Digital monitoring for:

**RPM** 

DC volts

Operating hours

Oil pressure

Coolant temperature

Digital AC metering - 3 phase, true

RMS, +/- 2 % accuracy

Voltage (L-L, L-N) Current (Phase) Average Volt, Amp, Frequency

kW, kVAr, kVA (Average, Phase, %)

Power Factor (Average, Phase)

kW-hr, kVAr-hr (total)

Generator frequency

Hertz

Safety Shutdown protection with common indicating light for:

Low oil pressure

High coolant temperature

Overspeed

Emergency stop

Failure to start (overcrank)

Low coolant level

#### Generator Protection

Generator phase sequence

Over/Under voltage

Over/Under frequency

Reverse Power (kW)

Reverse Reactive Power (kVAr)

Overcurrent

### **Engine Monitoring**

Coolant temperature

Oil pressure

Engine speed (RPM)

Battery voltage

Run hours

Crank attempt and successful

start counter

### **Engine Protection**

Control switch not in auto (alarm)

High coolant temp (alarm

and shutdown)

Low coolant temp (alarm)

Low coolant level (alarm)

High engine oil temp (alarm

and shutdown)

Low, high, and weak battery voltage

Overspeed

Overcrank

#### Inputs & Outputs

Two dedicated digital inputs

Six programmable digital inputs

Six programmable form A dry contacts

Two programmable form C dry contacts

Two digital outputs

Communications

Primary and accessory CAN data links

RS-485 annunciator data link

Modbus RTU (RS-485 Half duplex)

Digital AC Meters - Volt, Amp, Hz -

w/ 3Ø Selector Switch

Digital Engine Gauges & Alarms

Remote Annunciator - Caterpillar 16 point

NFPA 110 - Qty 1

Caterpillar Enclosure Sound Attenuated Package

Sound Rating of 76 dBA at 23'

in free-field environment

Wind Rating of 150MPH

**Key Locking Doors** 

Epoxy Enamel Paint Finish – CAT White Linear Vibration Isolators (Elastomeric)

Engine / Generator Skid-Base Rails

Fuel System Primary fuel filter w/ integral water separator

& secondary filter

Fuel priming pump Flexible fuel lines Fuel pressure gauge

Fuel cooler

Engine fuel transfer pump

Fuel Tank Diesel Base Tank

UL 142 Listed Double Wall

209 Gallon Capacity/194 Gallon Usable carbon steel - heavy gauge material

Lockable Fuel Fill

12' Above Grade Normal Vent

shipped loose to be installed at site

12' Above Grade Emergency Vent

shipped loose to be installed at site

5 Gallon Spill Bucket

Overfill Prevention Valve (Mechanical)

Fuel sender (FL4STG1)

Low, Critical Low, High & Critical High

Level Gauge, Fuel Lines, Venting & Alarm Contacts Factory Testing - Standard Caterpillar Test at .8 PF

for Full Rated Load

Factory Warranty - 2 Yr./1000 hours\*

\*NOTE: When purchased through Sourcewell Program Factory Warranty is extended to

4 Yr./2000 hours at no additional cost.

Current Lead Time

Accessory Items

Mounting System

13-15 weeks out of the factory ARO

## **AUTOMATIC TRANSFER SWITCH – Existing Building**

Zenith Series - Automatic Transfer Switch

Amperage: 400 Amp # of Poles: 3 Pole

System Voltage: 240/120 volt, 1 phase

Voltage Frequency: 60 HZ Enclosure: NEMA 3R Operation: Open Transition

Application: Utility to Generator - Auto Transfer

ModBus Network Card

Anti-condensation Heater & TStat

50 kAIC Rating 2 Year Warranty

# **AUTOMATIC TRANSFER SWITCH - New Building**

Zenith Series - Automatic Transfer Switch

Amperage: 400 Amp # of Poles: 3 Pole

System Voltage: 240/120 volt, 1 phase

Voltage Frequency: 60 HZ

Enclosure: NEMA 1

Operation: Open Transition

Application: Utility to Generator - Auto Transfer

ModBus Network Card

50 kAIC Rating 2 Year Warranty

#### Accessories & On-Site Services:

Service & Make Ready Standard Caterpillar Testing

Delivery to Job Site

Initial Fuel Fill

On-Site Start Up testing using resistive load banks - 2 hours

Performed during normal business hours

On-Site Training available during start up testing

if requested at time other than start up additional costs will be incurred

O & M Manual - Qty 1

Submittals provided in electronic format

Note: All start up and commissioning services to occur one/same day.

## Install Scope of Work:

- 1. Permit included.
- 2. All wiring to meet the requirements of the 2017 National Electrical Code.

- 3. No back charges for cleanup will be accepted unless prior written notice and forty-eight hours has been given to comply.
- 4. Any and All Misc. Materials to make a complete and operable assembly.
- 5. Crane to set New generator.
- Demo of Existing Generator and ATS.
- 7. Wire for the line to new ATS at new Building. (225 Amp /1ph.)
- 8. Install of (1) 600 Amp/ 1ph/ 120/240V /MLO/ Nema 3r Panelboard with (1) 200A 2p and (1) 225 A 2p Breaker to Feed the Emergency power to the (2) buildings.
- 9. Conduit and Wire for EM. power to 600A Panel from 600 A 1ph Breaker located in the generator.
- 10. Conduit and Wire for the Start wiring from the (2) ATS to the generator.
- 11. Wire for the Remote Annunciator from generator.
- 12. Cutting and Removal of concrete and pour back for the new generator including housekeeping pad.
- 13. Demo of Existing Gate and Install of New 48" Wide Gate to Match the height of Block Wall.
- 14. Concrete and Block to Extend the Pad and Walls to accommodate the new generator and associated equipment.
- 15. Disconnect and Subpanel to make tap at main disc. for shore power to generator.
- 16. Conduit and Wire for the line /load to ATS at Existing Service Disconnect. (200 Amp 1ph.)
- 17. Conduit and Wire from the 200Amp 1ph. Breaker for EM. power to Existing building through new ATS.

#### Exclusions:

Coordination study, infrared or NETA testing of ATS or Generator/s Engineered drawings/plans designed and sealed by an engineer Landscaping or irrigation

HVAC and Mechanical, controls, control wiring and starters
Underground Conduits from building for all Power and Control
Digging/Trenching/Boring for conduits from building to generator
Trenching, backfill, concrete, cutting, patching, coring and roof penetrations.

Roof Penetrations

**Utility Company Charges** 

Temporary Power

Bondina

Local codes are not included unless stated

State/Local/Emissions Taxes

#### Qualifications:

1. All Products included in this Proposal are valued (based on current Commodity Pricing) at the time of the Bid. An Increase in the price of Raw Materials between the estimate time and time of official award of the project will require a Change in the final price to complete the project.

2. Price firm for 30 days and based on a mutually acceptable contract.

3. Pricing is based on all work being completed Monday through Friday 8:00 AM through 4 PM.

RETAIL PRICE......\$186,447.02 Sourcewell Member PRICE.....\$164,515.71

# Reference Sourcewell Contract # 080613-CAT

Sourcewell (formerly NJPA)

Contract 080613-CAT valid through end of 2018.

To be replaced by Contract #120617-CAT valid through 1/29/2022.

Note: Any code interpretations made by the inspector with jurisdiction that lead to changes in material or scope of work are billable and will be handled as a change order should they arise.

Terms are 30days net with approved credit.

Price is valid for 30 days

Price does not include applicable taxes

To order or start submittals please sign, date and send back to my attention:

Name

Date

Thank you,

John Fabrega
Power Systems Sales
2001 N. Loop 12
Irving, TX 75061
Mobile: 972.978.5407
john.fabrega@holtcat.com



# **HOLT POWER SYSTEMS TERMS & CONDITIONS**

Mufflers

Mufflers are to be lifted and put in place on top of the enclosure at the time of off loading by the installing contractor.

Proposal

This proposal is provided to meet the spirit and intention of the project equipment requirements. Some interpretational differences between our proposal and the specifications may exist, therefore the above bill of material contains our offer for this project, none other is expressed or implied unless stated in writing.

Pricing

Recently the cost of some of our vendor products has experienced severe price swings in the upward direction. Therefore it has become increasingly difficult to hold our prices for a prolonged period of time. If our quote is older than 20 days please call to verify our price.

Taxes

The above price(s) does(do) not include state and local taxes unless otherwise specifically stated. A 1.5% additional ser charge is required by the state of Texas for all stationary engine equipment due to emission restrictions. This is in addition to any state and local taxes that may be required.

Lead Time

Standard delivery of proposed Caterpillar Generator Set to jobsite will be confirmed after receipt of order and submittals are approved and credit terms are agreed.

Automatic transfer switch(es) is(are) quoted to jobsite in approximately 6-8 weeks after receipt of order and approved submittals and approved credit terms are agreed.

The above quoted lead-times are standard lead-times from the factory at the time of this quotation. In some cases lead-times maybe able to be improved to assist in customer needs. Please call and inquire about possible improved lead-times.

Please note: The Caterpillar factory has mandatory factory shutdowns for two weeks in December/January and one week in July. The length of those shutdowns will extend lead-times on orders entered at those times. Orders, which include non-standard features, may require additional time before shipment. Consult with your Caterpillar dealer at the time of order.

Holt Power Systems has made a significant commitment to ensuring we are able to quickly respond to opportunities by maintaining a substantial inventory that may reduce the lead-time above.

**Special Notes** 

Please verify the voltage, number of poles in ATS, terminal conductor sizes and other Bill of Material items quoted above as compared to the requirements of this project. Lugs for terminations above 1200A are not included.

Fuel Tank

Increasingly we are seeing dramatic changes occur at the municipal level in regard to fire code requirements. They are too numerous and variable to keep track of for each of the area municipalities. Unless otherwise stated within the body of this quotation, the fuel tank included is as specified by the written specifications of this project (if specifications were supplied at the time of quotation). The specifications may be in conflict with City Fire Codes for the location of the project. We will make every attempt to notify you of specification variances with local codes when known, however responsibility for compliance lies with the specifying engineer and those that pull the permit for the project.

**Payment** 

Terms are NET 30 DAYS at the time of shipment to jobsite based on Holt credit department approval, otherwise terms are C.O.D.

Term's

Payment due in full Net 30 after delivery with approved Holt credit or COD at time of shipment.

Sales tax will be added to invoice. Resale tax certificate must be on file with the Holt credit department for tax-exempt sales.

Warranty

Caterpillar standard two (2) year warranty applies for standby applications. Standard manufacturer's warranty applies to all non-Caterpillar equipment. Copies of warranty statements are available upon.

Cancellation

There will be a minimum 25% cancellation fee for orders cancelled, once placed and accepted by Holt Power Systems. Cost of custom components, completed fabrication, or any other work performed at the time of cancellation will be added to the cancellation fee. If all material have been acquired the cancellation fees will be 100%. Caterpillar content, 14 days after orders placed will be 100% of the order.

Other

Holt Power Systems is an equipment supplier only. No fuel, wiring, connecting, hook-up,

plumbing, or other installation type labor is included in the proposal unless noted herein.

The customer is responsible for any and all installation of the above equipment. Holt personnel will perform an installation audit prior to start-up.

Unless stated otherwise in this proposal, service and/or maintenance for this equipment are not included. Our company product support service group will be glad to quote the end user of this equipment for those services under a separate proposal.

All equipment needed to perform any loading or unloading of the equipment supplied by Holt Power Systems is the responsibility of the buyer.

Holt Power Systems limits the scope of supply for this quotation to the equipment and services listed in our bill of material. Unless specifically listed in our bill of material, equipment not indicated is to be supplied by others. We have detailed the equipment proposed in the bill of material. Please carefully review it to be certain it meets your requirements.

No NETA, infrared scanning, meg-testing or other third party testing is included unless expressly indicating in writing above.

We reserve the right to correct any errors or omissions.

Contracts which include penalty or liquidated damage clauses for failure to meet promised shipping dates are not acceptable or binding on Holt Power Systems, unless accepted and confirmed in writing by an officer of Holt Power Systems and it's headquarters.

Holt Power Systems standard terms and conditions are included in the quotation and hereby become part of this quotation. These same terms need to be noted on any purchase order received by Holt Power Systems.

Holt Power Systems will not be responsible for any labor or material charged by others associated with the start-up and installation of this equipment unless previously agreed upon in writing by Holt Power Systems. Star-ups are to be conducted between Monday through Friday during normal business hours and excluding nights, weekends, or holidays unless agreed otherwise in writing. Otherwise our standard overtime rates will apply.

We value your confidence in us, and the products we represent and appreciate your business. If there are any terms, conditions, or any other aspect of this quotation you do not understand, please contact us immediately and we will gladly clarify.