



**City of East Peoria
 Department of Buildings & Inspections
 Facilities Management Division
 401 W. Washington Street
 East Peoria, IL 61611**

DATE: February 28, 2020

TO: The Honorable Mayor and City Council

THRU: Mark Hill, Commissioner of Accounts and Finance *MH*
 John Knapp, Fire Chief, Steve Roegge, Police Chief

FROM: Robert Cole, Director of Buildings & Inspections

SUBJECT: Public Safety Building Emergency Power Generator Replacement

DISCUSSION: The existing generator transfer switch failed last November 2019, and parts are no longer available for both the generator and transfer switch. Because of the safety issues concerning the need to supply emergency backup power to critical equipment in the event of a utility loss the City staff is recommending the generator be replaced with a more efficient generator.

The existing generator is located inside the sally port making it difficult to repair or access during open investigations, the new replacement will be located on the outside of the building in an enclosure to meet all U.S. EPA Emissions Controls. Upon moving the new generator to the outside of the building additional concrete and electrical work would need to be completed to facilitate the generator.

The new replacement generator was selected from Altorfer Cat Power Systems in coordination with Sourcewell which holds competitively solicited cooperative contracts specific for municipalities was completed with a 31 % discount of \$33,716.00. The additional concrete went out bids and the lowest responsible bid was from C&G Concrete Construction Co. Inc. for \$10,000.00. Electrical work went out for bids and the lowest responsible bid was from RNS Electric, Inc for \$6,125.00 including rerouting the main power to the new generator and completing all final connections.

Dept.	Amount	Account	Budget	Spent	Available
Police	24,920.50	03-00-0-050	50,000.00	13,107.88	36,892.12
Fire	24,920.50	04-00-0-052	115,000.00	42,146.77	72,853.23
Total	<u>49,841.00</u>				

RECOMMENDATION: Accept the recommendation to replace the existing generator from Altorfer Cat Power Systems in the amount of \$33,716.00.

Accept lowest responsible bid received from RNS Electric Inc. in the amount of \$6,125.00 for electrical work to install the emergency power generator.

Accept lowest responsible bid from C&G Concrete Construction Co. Inc. in the amount of \$10,000.00 for concrete work including removal of sidewalks and installing new concrete generator pad at Public Safety Building.

File: RC doc. 02282020

RESOLUTION NO. 1920-121

East Peoria, Illinois
_____ , 2020

RESOLUTION BY COMMISSIONER _____

**RESOLUTION ACCEPTING THE LOWEST RESPONSIBLE BIDS
FOR PUBLIC SAFETY BUILDING EMERGENCY POWER GENERATOR
REPLACEMENT PROJECT**

WHEREAS, the existing generator transfer switch for the City's Public Safety Building failed in November 2019, and parts are no longer available for both the generator and transfer switch; and

WHEREAS, due to the importance of maintaining the back-up power for the Public Safety Building, the City is in need of a new emergency power generator (the "Generator") along with electrical work to install the Generator and concrete work needed to install a new concrete pad for the Generator (the "Public Safety Building Emergency Power Generator Replacement Project"); and

WHEREAS, the City has now sought bids for Public Safety Building Emergency Power Generator Replacement Project, and has received low bids from (1) Altorfer Cat Power System in the amount of \$33,760.00 for the purchase of the Generator; (2) RNS Electric, Inc. in the amount of \$6,125.00 for electrical work to install the Generator; and (3) C&G Concrete Construction Co. Inc. in the amount of \$10,000.00 for concrete work for the new concrete Generator pad; and

WHEREAS, the City hereby finds that it is in the best interest of the City to accept the bids from Altorfer Cat Power System, RNS Electric, Inc., and C&G Concrete Construction Co. Inc. as the lowest responsible bidders for the Public Safety Building Emergency Power Generator Replacement Project;

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF EAST PEORIA, TAZEWELL COUNTY, ILLINOIS, THAT the bids from Altorfer Cat Power System, RNS Electric, Inc., and C&G Concrete Construction Co. Inc. for the Public Safety Building Emergency Power Generator Replacement Project are hereby accepted and approved, and the Mayor or his designee is hereby authorized and directed to enter in a contracts with Altorfer Cat Power System, RNS Electric, Inc., and C&G Concrete Construction Co. Inc. for the Public Safety Building Emergency Power Generator Replacement Project at a total costs submitted with the low bids, together with such modifications therein as the Mayor in his discretion may approve; provided, however, that the City shall have no obligation under the terms of this Resolution until the executed originals of such contracts have been delivered to Altorfer Cat Power System, RNS Electric, Inc., and C&G Concrete Construction Co. Inc..

APPROVED:

Mayor

ATTEST:

City Clerk



BARTONVILLE · CEDAR RAPIDS · DAVENPORT · E. PEORIA · HANNIBAL · MOBERLY · ROCK FALLS · SPRINGFIELD · URBANA

Quote#: TWS201730275147

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PROPOSAL

Customer: City of East Peoria Date: 11/12/19
 Attention: Robert Cole
 Project Name: Central Fire Station Diesel Generator – Sourcewell (NJPA) – Revision 1

Altorfer Power Systems appreciates your interest in Caterpillar power generation equipment and the opportunity to work with you on this project. We propose the following equipment to meet your requirements:

ITEM I

One (1) new Caterpillar model D100-8 diesel engine generator set rated at 100W standby, 120/208Volt, 3-Phase, 60 Hz, 1800 RPM, weather protective enclosure, 24 hour fuel tank base, equipped per attached bill of materials. Sourcewell four year platinum ESC warranty and start up included.

D100-8 100kW GENERATOR LIST PRICE.....	\$	44,719.00
LESS 31% SOURCEWELL DISCOUNT PER CONTRACT #080613-CAT.....	\$	- 13,863.00
NET ITEMS.....	\$	530.00
<hr/>		
SOURCEWELL MEMBER PRICE.....	\$	31,386.00

NON-SOURCEWELL SOURCED GOODS ATTACHMENT PRICES

FIELD SERVICE START-UP & TRAINING.....	\$	995.00
FREIGHT (fob: Peoria – not unloaded).....	\$	1,335.00
<hr/>		
TOTAL PRICE (ITEM I).....	\$	33,716.00

NOTES:

1. Freight included to jobsite, curbside. No offloading included.
2. Terms are NET 10 days on approved account, Price valid for 30 days.
3. The above bill of material does not include demolition, removal, terminations, installation, labor, fuel, fuel piping, air ducting, exhaust silencer installation, exhaust piping or electrical wiring between loose items such as engine, control gear, transfer switches, day tanks, battery charger, etc.
4. The prices quoted are current and subject to change to those in effect at the time of shipment.
5. This equipment carries the manufacturer's warranty, which supersedes all other verbal or written statements of any sort whatsoever.
6. The purchaser agrees to pay any and all taxes, assessments, licenses, and governmental charges of any kind whatsoever upon said equipment which, may be imposed or assessed or resulting to the seller on account of the possession or use of said equipment by purchaser.
7. All agreements are contingent upon government restrictions, strikes, accidents, delay of carrier, and other delays unavoidable.
8. Coordination studies & relay settings are not included. Permitting not included.

BILL OF MATERIALS**PACKAGE GENERATOR FEATURES**

- ✓ EMCP 4.2 control panel
- ✓ Remote annunciator panel
- ✓ Radiator cooling
- ✓ UL circuit breaker
- ✓ 10 amp battery charger
- ✓ Electric starting, batteries
- ✓ Battery heater
- ✓ Weather protective enclosure
- ✓ 24 hour fuel tank base (209 gallons)
- ✓ Charging alternator
- ✓ Permanent magnet exciter
- ✓ Generator running relay
- ✓ Anti-condensation heater
- ✓ Coolant block heater
- ✓ First fill lubricating oil
- ✓ First fill coolant, installed
- ✓ Coolant and lube convenience drain
- ✓ (1) set O & M Manuals
- ✓ Startup service
- ✓ Sourcewell 4 year platinum ESC warranty

EQUIPMENT STARTUP

- ✓ Includes site visits and consultation prior to delivery and prior to startup by Altorfer's project engineering team.
- ✓ One (1) day of on-site start-up testing is included for only the equipment purchased through Altorfer Power Systems.
- ✓ Time allowed for one factory certified technician will be based on accessibility, site preparation and safety concerns for both equipment and personal.
- ✓ This includes systems preparation, equipment start-up and functional operational test utilizing building load only.
- ✓ These services will be performed during normal business hours, Monday through Friday 7:30 am to 3:30 pm.
- ✓ All external mechanical and electrical connections must be made by others prior to start-up site visit by Altorfer field technician. See below if additional visit is required due to lack of rediness.
- ✓ Additional personal required or revisits are available and will require a written request for services with a change order by an authorized person and will be billed at prevailing rates.
- ✓ Operator training is included.

Thank you for the opportunity to quote this project. Please feel free to contact us if you would like any additional information or assistance.

ALTORFER POWER SYSTEMS AN EQUAL OPPORTUNITY EMPLOYER PURCHASES SUBJECT TO EXECUTIVE ORDER 11246, SEPT. 24 1965

Sincerely,

Accepted By:

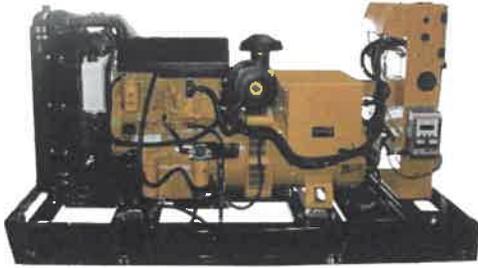
Tim Scheuermann

Tim Scheuermann
Phone: 309-697-1234 x5109
Mobile: 309-696-8707

Print Name:

C4.4 Generator Set

Electric Power



Caterpillar is leading the power generation marketplace with Power Solutions engineered to deliver unmatched flexibility, expandability, reliability, and cost-effectiveness.

Image shown may not reflect actual configuration

Specifications

Generator Set Specifications	
Rating	100 ekW (125 kVA)
Voltage	480 Volts
Frequency	60 Hz
Speed	1800 rpm

Generator Set Configurations	
Emissions/Fuel Strategy	U.S. EPA Certified for Stationary Emergency Application (Tier 3 Nonroad Equivalent Emission Standards)

Engine Specifications		
Engine Model	C4.4 Vertical In-line 4, 4-cycle diesel	
Bore	105.0 mm	4.13 in
Displacement	4.4 L	268.5 in ³
Stroke	127.0 mm	5.0 in
Compression Ratio	16.7:1	
Aspiration	Turbocharged Air-to-Air Aftercooled	
Governor Type	Electronic	
Fuel System	Common Rail	

Package Dimensions*		
Length	2362 mm	93 in
Width	1110 mm	44 in
Height	1304 mm	51 in
Weight†	1166 kg	2570 lb

*Note: For reference only – do not use for installation design. Please contact your local dealer for exact weight and dimensions.

†Weight includes: Oversize generator, skid base, circuit breaker, oil, and coolant.

C4.4 Generator Set

Electric Power

Benefits & Features

Cat® Diesel Engine

- Reliable, rugged, durable design
- Field-proven in thousands of applications worldwide
- Four-stroke cycle diesel engine combines consistent performance and excellent fuel economy with minimum weight
- Electronic engine control

Generator

- Matched to the performance and output characteristics of Cat engines
- Industry-leading mechanical and electrical design
- Industry-leading motor starting capabilities
- High efficiency

Cat EMCP Control Panel

The EMCP controller features the reliability and durability you have come to expect from your Cat equipment. EMCP 4 is a scalable control platform designed to ensure reliable generator set operation, providing extensive information about power output and engine operation. EMCP 4 systems can be further customized to meet your needs through programming and expansion modules.

Seismic Certification

- Seismic certification available
- Anchoring details are site specific, and are dependent on many factors such as generator set size, weight, and concrete strength
- IBC certification requires that the anchoring system used is reviewed and approved by a professional engineer
- Seismic certification per applicable building codes: IBC 2006, IBC 2009, IBC 2012, IBC 2015

Design Criteria

- The generator set accepts 100% rated load in one step per NFPA 110 and meets ISO 8528-5 transient response
- Cooling system designed to operate in 50°C/122°F ambient temperatures with an air flow restriction of 0.5 in. water

UL 2200/CSA – Optional

- UL 2200 Listed
 - CSA Certified
- Certain restrictions may apply. Consult with your Cat dealer.

Single-Source Supplier

Fully prototype tested with certified torsional vibration analysis.

Worldwide Product Support

Cat dealers provide extensive post-sale support including maintenance and repair agreements. Cat dealers have over 1,800 dealer branch stores operating in 200 countries. The Caterpillar S•O•SSM program cost effectively detects internal engine component condition, even the presence of unwanted fluids and combustion by-products.

C4.4 Generator Set

Electric Power

Standard Equipment

Air Inlet

- Single element Air filter

Cooling

- Radiator and cooling fan complete with protective guards
- Standard ambient temperatures up to 50°C (122°F)

Exhaust

- Exhaust flange outlet

Fuel

- Primary and secondary fuel filters
- Fuel priming pump
- Flexible fuel lines

Generator

- Matched to the performance and output characteristics of Cat engines
- Load adjustment module provides engine relief upon load impact and improves load acceptance and recovery time
- IP23 protection
- Integrated Voltage Regulation

Governor

- Electronic governor – ADEM™ A4

Control Panels

- EMCP 4.2 Series generator set controller

Mounting

- Rubber vibration isolators

Starting/Charging

- 12 volt starting motor
- Battery with rack and cables

General

- Paint – Caterpillar Yellow except rails and radiators gloss black

RNS Electric, Inc.

PO Box 367 Washington, IL. 61571
309-444-5200 / Fax 309-444-5201

Proposal

November 17, 2019

City of East Peoria Public Works
2232 E. Washington St.
East Peoria, IL 61611

Re: Installation of provided 100Kva diesel generator at Central Fire House.

We propose to supply and install the following material.

- **Installation** only of 100-kw diesel generator. This generator shall be located on new concrete pad in location of old fuel tank.
- New metal conduit with copper wire for above ground work.
- PVC conduit with copper wire for underground electrical.
- Disconnection of existing generator.
- Power to block heater and battery charger.
- Unload and setting of generator on concrete slab.

Total Quote: \$6,125.00

This Proposal does not include:

- **Overtime or double time.**
- **Any removal of existing fuel tank.**
- **Any transfer switch installation.**
- **Any remote annunciator installation.**
- **Any existing generator removal.**
- **Any concrete pad.**
- **Any fuel for generator.**
- **Any sales tax.**

Sincerely,
RNS Electric Inc.

Accepted by:

Ty Slonneger
General Manager

By: _____

Date: _____

Committed to our customers and quality.

PROPOSAL

OBERLANDER



2101 N. Main Street East Peoria, IL 61611
Electrical Contractors

Phone: (309) 694-1468

FAX: (309) 699-9108

Proposal Submitted To: City of East Peoria ATTN: Robert Cole	Phone: Date: 2-7-20 Fax: Email:
Street:	Job Name: Central Fire Station Generator Wiring
City, State, Zip Code:	Job Location: 201 W. Washington St East Peoria Il

OBERLANDER ELECTRIC proposes to furnish and install all labor, tools, materials and equipment necessary to do the following electrical work per our interpretation of plans and specifications to include:

- 1) Provide and install conduit and wiring from the transfer switch out to the new generator location to include the 400-amp power feeder, block heater battery charger feed (from em panel) and spare ¼ conduit. We are assuming that the owner will have the concrete removed for us to install conduit over to the new pad location
- 2) Disconnect the existing electrical to the generator and abandon the generator in place
- 3) Set the owner provided generator on the owner provided generator pad
- 4) No tax
- 5) Assuming we will not be charged for the electric permit
- 6) All start up, fuel and etc. are by the owner

All labor and materials- \$6,540.00

If the owner wants the old generator removed add- \$2,750.00

****ALL WORK TO BE PERFORMED DURING REGULAR BUSINESS HOURS BETWEEN 7:00 A.M. AND 4:30 P.M. MONDAY THROUGH FRIDAY****

Payment to be made as follows
Net - 30 days

all material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents, or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workmen's Compensation insurance.

OBERLANDER ELECTRIC CO.

By _____
Edward J Enken

Note: This proposal may be withdrawn by us if not accepted within 30 days.

Acceptance of Proposal - The above prices, specifications and conditions are satisfactory and are hereby accepted. **Signature** _____

You are authorized to do the work as specified. Payments will be made as outlined above.

Date of Acceptance: _____ **Signature** _____



**C&G CONCRETE CONSTRUCTION
CO., INC.**

1906 Meadows Avenue / East Peoria, Illinois 61611

Phone (309) 699-0384 or Fax (309) 699-6922

PROPOSAL

Submitted to: City of East Peoria

Date: November 18, 2019
Revised February 28, 2020

Project: New Generator Pad

We propose to do the following Scope of Work for the Sum of: \$10,000.00

1. Demo existing sidewalk area where new Generator is going to sit.
2. Excavate for new Generator
3. Install CA-7 Drainage fill per drawing
4. Install New 12" thick Generator pad with thickened edges reinforced with W4.0 x W4.0 mesh
5. Install 9ea. 18" Diameter x 48" deep frost legs w/#5 L bar
6. 3ea. install 6" Diameter pipe bollards
7. C&G will not be responsible for location of generator pad.

Exclusions:

- Testing services
- Winter Service
- **Layout by others**
- Permits
- Bond

Submitted by; *Rodney Slusher* – Estimator

C & G Concrete Construction Co.

Accepted by; _____

Date _____

BID PROPOSAL

DATE: February 10, 2020
PROJECT: Generator Pad
WORK CATEGORY: Site Concrete
BASIS OF BID: Plans & Specs
ADDENDA: None

TO: City of East Peoria
Robert Cole
401 W Washington St
East Peoria, IL 61611
Email: RobertCole@cityofeastpeoria.com

SUBMITTED BY: Austin Wissel
DIRECT: (309) 284-1739
CELL: (309) 696-9312
E-MAIL: austinwissel@ottobaum.com

We hereby propose to perform & complete the work defined herein for the stated sum(s) as follows:

BASE BID SCOPE INCLUDES:

- Mobilize equipment and materials to jobsite
- Sawcut around existing pavement to be removed
- Demo and dispose of existing concrete pavement in new slab area
- Leave existing curb and gutter in place
- Core out existing base down to the new sub-base
- Auger (9) 18" diameter holes per plans for frost footing
- Provide 6" of CA-7 stone base per plans
- Provide and install all reinforcement per plans
- Thicken slab edges per plans
- Block out slab for electrical service- location and size to be provided by owner
- Pour all concrete with 4,000 PSI mix
- Broom finish all concrete
- Sawcut control joints into new pavement
- Provide and install (3) 6" diameter pipe bollards
- Provide and install expansion joint between building and slab
- Clean up and demobilize all equipment and debris.

BASE BID

LUMP SUM: \$ 16,871.00

SCOPE EXCLUDES:

- Locating of private utilities not identified by JULIE services
- Establishing control layout
- Seeding/landscape restoration
- Demolition not called out above
- Cleaning or painting of pipe bollards
- Removal or replacement of tower grounding system
- Winter protection/conditions
- Special insurance (i.e., OCP, Builder's Risk, etc). Otto Baum standard insurance coverage will be provided.
- Liquidated damages
- Porta potty
- Dumpsters
- Bonds
- Testing/engineering fees
- Permits

CLARIFICATIONS:

- Existing or previously installed underground utilities or other hidden construction requiring protection will be located and marked by others as necessary to complete our work.
- Proposal based on regular work week, i.e., M-F 7:00 AM - 3:30 PM, weather permitting.
- Saturdays will not be considered "make-up days" due to weather or other interferences throughout the week.
Additional costs due to schedule acceleration or compression shall be paid by Change Order.
- Work shall not be performed under threat of inclement weather or cold temperatures (below 40 F).
- Quoted prices are good for 30 days
- Pricing assumes work will be done in 2020

ACCEPTANCE - By signatures below, the parties agree to these terms, considerations, and obligations as constituting a binding contract.

Customer Signature & Title

Date

Otto Baum Company, Inc.

02/10/20
Date

