

Proposal by

Date: October 23, 2024



Proposal No. EPG2024MWR428

8050 County Road 101 East
Shakopee, MN 55379
952.887-4599

To: New Prague Utilities Commission
118 Central Avenue N
New Prague, MN 56071

Re: Furnishing Diesel Generating Equipment
New Prague Utilities Commission
New Prague, MN 56071

Attn: Bruce Reimers – General Manager

DGR Project No. 417209

WE PROPOSE TO FURNISH IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS, TERMS AND CONDITIONS

QUANTITY: Four (4) New CATERPILLAR Diesel Generator sets, Indoor Packages
MODEL: C175-16 TA, EPA Tier 4 Final
RATING: 3100 kW Standby, 2825 kW Prime Rating Power
VOLTAGE: 12,470 volt, 3 phase, 4 wire, 60 HZ, 1800 RPM
EMMISSIONS: Tier 4 After treatment system including SCR, dosing cabinet
COOLING: Remote radiators
WARRANTY: Two (2) Year Caterpillar Warranty

TOTAL PRICE: See bid form*

- * Please refer to the attached Bill of Material.
- * Price does not include state or local sales and/or use tax.
- * Delivery Jobsite on owner supplied pad - included in final billing

APPROXIMATE SHIPPING DATE: See Bid Form

F.O.B: Ziegler

TERMS: 70% upon shipment from Factory, 20% at delivery and 10% after final completion

THIS PROPOSAL SUBJECT TO ALL PROVISIONS OF THE CONTRACT AND WARRANTY ON REVERSE SIDE

ACCEPTED:

Respectfully submitted,
ZIEGLER INC.

By _____

Mark Reuter, Sales Engineer

By _____

Subject to approval by

APPROVED:

ZIEGLER INC.

Its _____

By _____

BILL OF MATERIAL
EPG2024MWR428

- 1 -

PACKAGED GENERATOR SET

Caterpillar heavy-duty diesel
CAT Model C175-16
Direct injected, turbocharged-air to air after cooled
V16 cylinder configurations
EPA Tier 4 Final Certified

AIR INLET SYSTEM

Air cleaner, regular duty, with service indicators
After-cooler core, copper nickel construction
Turbochargers, single stage

CONTROLS AND INSTRUMENTATION, EMCP 4.3

Enclosure interior mounted control panel
Emergency stop pushbutton.
EMCP 4.3 controller including:
24-volt DC operation.
Environmental sealed front face.
Text alarm/event descriptions.
Warning/shutdown with common LED indication.
Of shutdowns with indicating lights for:
Low oil pressure.
High coolant temperature.
Overspeed.
Emergency stop.
Failure to start (overcrank).
Low coolant level
Generator mounted - rear facing.
Controls:
Speed adjust.
Auto/start/stop control.
Engine cool-down timer.
Engine cycle crank.
Alarm acknowledge.
Lamp test.
True RMS AC metering, 3-phase, +/-0.25% accuracy.
Digital indication for:
RPM
DC volts
Operating hours
Oil pressure (psi, kPa or bar)
Coolant temperature
Volts (L-L & L-N), frequency (Hz)
Amps (per phase & average)
- 12 programmable digital inputs.
- 16 programmable digital outputs.
- 3 programmable analog inputs.
- 3 programmable analog outputs.
- 2 programmable PWM outputs

BILL OF MATERIAL

EPG2024MWR428

- 2 -

CONTROLS AND INSTRUMENTATION EMCP 4.3, cont.

Power metering
Protective relaying
Enhanced engine monitoring
Modbus Communications

COOLING SYSTEM

Low noise remote radiator, designed for 75dba @ 7 meters
Fan, blower type, fan guards
Drive type: belt
Motor speed: 1800 rpm
VFD panel for motors
Estimated Dimensions: 29'L x 11'W x 14'H, 26,000lbs.
Ladder and maintenance platform
Surge tank with sight glass and level switches
Vibration switch, one per motor
Core guard
VFD control panel for remote radiator fan motors
Thermostats and housing
Jacket water pump, gear driven, centrifugal
Jacket water heater
 One (1) 9 kW heater
 480 volt, 1 phase
 High-pressure hose with isolation valves

EXHAUST SYSTEM

Insulated CEM (Clean Emissions Module)
CEM Dosing Module
CEM Dosing Module features:
 Air Filter
 DEF filter
 120VAC
 Freeze Protection
 DEF Line Purge
 External Relay
 Harness from Dosing Module to CEM
 Air and heated DEF lines from Dosing Module to CEM
Dry exhaust manifold
Exhaust piping from turbo outlet to CEM inlet included and provided by Caterpillar
Flanged faced inlets at CEM inlet (16") and single outlet (20")
Exhaust CEM support stand
304 S/S dosing lines
Piping, insulation and heat tracing between DEF tank and dosing cabinet
Option: 22" Hospital grade Exhaust silencer, side in end out.
 Stand-offs for cladding
 Top Flange Gussets for stack support

FLYWHEEL AND FLYWHEEL HOUSING

Flywheel, SAE No. 00
Flywheel housing, SAE No. 00
SAE standard rotation

BILL OF MATERIAL
EPG2024MWR428

- 3 -

FUEL SYSTEM

Primary fuel/water separator
Secondary fuel filters
Fuel priming pump
Fuel transfer pump
Fuel check valve on supply line
Fuel consumption reading available in generator control panel
Fuel lines, flexible and braided high pressure
Fuel cooler, remote for installation by others
One (1) Fuel day tank
 Day tank controller
 600 gallon capacity
 Rupture basin 150% capacity
 Fuel in basin switch
 4" emergency and 2" normal vents

GENERATOR AND GENERATOR ATTACHMENTS

Form wound, 3042 frame, 12,470 volt
3 phase brushless, salient pole, 4 lead.
Permanent Magnet excitation
Anti-condensation space heater
Class H insulation, 105 deg C rise at 40C ambient
Right side extension terminal box, bus bar connections, top
 mounted, bottom cable entry
Caterpillar Voltage Regulator (CDVR)
 CDVR includes reactive droop capability, 3-phase voltage sensing,
 KVAR/PF modes, RFI suppression, min/max exciter
VAR/P.F control and sharing needs to be part of the control scheme (BY OTHERS).
Differential CT installed in generator junction box, CT supplied by others.

GOVERNING SYSTEM

CAT Electronic Governor (ADEM A4)

LUBE SYSTEM

Lubricating oil (CJ-4)
Gear type lube oil pump
Integral lube oil cooler
Oil filter, filler and dipstick
Oil drain lines and valve
Pre lube oil system, factory installed
Caterpillar Closed Crankcase Ventilation (CCV)

MOUNTING SYSTEM

Rail base, engine-generator-radiator length
Linear vibration isolators between base frame and engine generator

PROTECTION SYSTEM

Safety shutoff protection, energized to shut off

BILL OF MATERIAL
EPG2024MWR428

- 4 -

STARTING SYSTEM

Starter motors, dual 24 VDC
Alternator, 24 volt, 45 amp
Batteries, lead acid, (6) 8D
Battery rack, corrosion resistant
Battery cables
Battery charger, float/equalize type, 35 ampere
 DC ammeter, voltmeter
Float and equalize potentiometers
Alarm contacts wired to EMCP 4.3, Charger Failure, and Low/Hi DC Volts

GENERAL

Submittal drawings
 Technical data, engine, generator, radiator, switchgear, ancillary equipment
Drawings, schematics, wiring diagrams
Testing
 Prototype testing
 Production, factory testing
 Start up and field-testing
 Factory Testing, Test Reports
Two (2) year warranty standard, optional Caterpillar five (5) year available
Deliver to jobsite on truck, crane and rigging on customer supplied pad
Operation and Maintenance manuals
Personnel training
24-hour parts and emergency service
Spare parts per specification

NOTES/COMMENTS/CLARIFICATIONS

Ziegler limits the scope of supply for this quotation to the equipment and services listed. It is assumed that equipment not listed is to be provided by others.
Ziegler cannot provide air emission permits for customers.
Ziegler will provide emission information on the Caterpillar engine to aid in the permitting process.
Orders are subject to re-stocking charges if cancelled after release for production.
Coordination study and protective relay settings by others.
DEF fluid provided by others.
Installation and terminations are by others.
Engine generator enclosure package rigging is included in our pricing.
Warranty is 2-years on all equipment provided, Extended 5 year warranty is for the engine and generator set only.
On 10/9/24 Ziegler submitted to DGR an electronic copy of our mark-ups regarding the Bidding Documents prior to bid date for engineer and owner review. Additional copies submitted with bid.

OPTIONS

Provide Caterpillar standard IVR voltage regulator in lieu of Caterpillar specified CDVR

DEDUCT: \$7,500.00/engine

BILL OF MATERIAL
EPG2024MWR428

- 5 -

LIMITATIONS OF LIABILITY AND PATENT LANGUAGE

IN NO EVENT WILL SELLER BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, SPECIAL, EXEMPLARY, ENCHANCED, INDIRECT, OR PUNITIVE DAMAGES, LOST PROFITS OR REVENUES, OR DIMINUTION OF VALUE, ARISING OUT OF OR RELATING TO THIS AGREEMENT OR PRODUCTS OR SERVICES, REGARDLESS OF: (A) WHETHER THE DAMAGES WERE FORESEEABLE; (B) WHETHER OR NOT SELLER WAS ADVISED OF THE POSSIBILITY OF DAMAGES; OR (C) THE LEGAL OR EQUITABLE THEORY (CONTRACT, TORT, OR OTHERWISE) ON WHICH THE CLAIM IS BASED. IN NO EVENT SHALL SELLER'S AGGREGATE LIABILITY ARISING OUT OF OR RELATED TO THIS AGREEMENT OR PRODUCTS OR SERVICES, WHETHER ARISING OUT OF OR RELATED TO BREACH OF CONTRACT, TORT, OR OTHERWISE, EXCEED \$500,000 OR THE TOTAL OF THE AMOUNTS PAID TO SELLER UNDER THIS AGREEMENT, WHICHEVER IS LESS. THE FOREGOING LIMITATIONS APPLY EVEN IF PURCHASER'S REMEDIES UNDER THIS AGREEMENT FAIL THEIR ESSENTIAL PURPOSE.

All intellectual property rights in the Products, including patents, trademarks, internet domain names, works of authorship, expressions, designs, and design registrations, whether are not copyrightable, trade secrets, and all other intellectual property rights related to or associated with Products (collectively, "Intellectual Property") are the sole and exclusive property of manufacturer. Purchaser will not acquire any ownership interest in any Intellectual Property under this Agreement. If Purchaser acquires any Intellectual Property rights in or relating to any Products by operation of law or otherwise, these rights are deemed and are hereby irrevocably assigned to manufacturer or its licensors, as the case may be, without further action by either party.

EXCEPTIONS

Ziegler Power Systems has taken exception to portions of the bid documents and has forward to DGR Engineering on 10/9/2024. Additional copies included with our bid package.

End of proposal.

BID FORM
(ADDENDUM NO. 1 VERSION)

FURNISHING DIESEL GENERATING EQUIPMENT

TO: New Prague Utilities Commission
Attn: Bruce Reimers, General Manager
118 Central Avenue N
New Prague, MN 56071

FROM: Bidder's Name Ziegler Inc.

Address 901 W 94th Street
Bloomington, MN 55420

Pursuant to and in compliance with the Advertisement for Bids and the Instructions to Bidders relating thereto, the terms of which are incorporated herein by reference thereto, the undersigned as bidder offers and agrees, if this offer is accepted, to furnish and deliver the equipment and materials in strict conformance with the Specifications forming a part of these contract documents and in accordance with following addenda for the sum indicated on the following bid schedule.

<u>Addendum Number</u>	<u>Addendum Date</u>
<u>1</u>	<u>10/11/2024</u>
<u> </u>	<u> </u>

1. The prices set forth herein do not include any sums which are or may be payable by the seller on account of taxes imposed by the State of Minnesota upon the sale, purchase or use of the equipment. If any such tax is applicable to the sale, purchase or use of the equipment, the amount thereof shall be paid by the purchaser.
2. The prices included herein are firm without regard for time of delivery, increase in cost from manufacturer, or any other factor.
3. The price of the equipment set forth herein shall include the cost of delivery to the job site in New Prague, Minnesota and off-loading and placement as detailed in the specifications.
4. Title to the equipment shall pass to the Owner upon completion of the contract and acceptance by the Owner.
5. This bid is void unless a materials contract based on this proposal is entered into by the Owner and the Supplier within 30 days after the date hereof.
6. The undersigned being familiar with all the details, conditions, and requirements hereby proposes to furnish the following material to the New Prague Utilities Commission in strict conformance with the specifications and Bidding Documents, to-wit:

DUPLICATE THIS FORM AS NECESSARY – MULTIPLE BIDS ARE ALLOWED

Item No.	Qty	Description	Unit Price	Extended Price
BASE BID ITEM NO. 1 - ITEMS:				
1A	4	New generator set, suitable for a remote mounted radiator , including local control panel and accessories as specified	\$ 2,179,530.00	\$ 8,718,120.00
1B	4	Remote-mounted radiator and surge tank	\$ 210,890.00	\$ 843,560.00
1C	1	New fuel oil day tank	\$ 18,163.00	\$ 18,163.00
1D	4	New set of starting batteries and cabling	\$ 7,000.00	\$ 28,000.00
1E	4	New battery charger	\$ 6,300.00	\$ 25,200.00
1F	4	Spare materials	\$ 4,500.00	\$ 18,000.00
TOTAL – ITEM NO. 1:			\$ 9,651,043.00	

REQUIRED OPTIONAL BID ITEMS:				
	4	Extended warranty period of 5 years for one (1) genset	\$ 25,000.00	\$ 100,000.00
	4	New hospital grade exhaust silencer	\$ 52,320.00	\$ 209,280.00
	4	Generator stator and bearing temperature measurement and display	\$ 1,550.00	\$ 6,200.00
	1	Solution of extended life ethylene glycol and high-quality water	\$31.00 x 4,000 est.	\$ 84,000 /gal

OPTIONAL BID ITEM:				
	4	Alternate remote radiator selection	\$ 3,000.00 Add / <u>Deduct</u> [Circle one]	\$ 12,000.00 Add / <u>Deduct</u> [Circle one]

Bid total with options \$9,841,243

REQUIRED INFORMATION:	
Guaranteed GVTC test output of the genset	<u>2800</u> kW
Guaranteed delivery date	Q4, 2027
Genset manufacturer, make, model	Caterpillar C175-16 T4 Final

* Guaranteed minimum subject to purchase price adjustment penalty after installation of new generator (see Specifications).

* * * END OF BID FORM FOR BASE BID NO. 1 * * *

Documentation Attached Checklist (Required to include - see General Requirements section):

(3) References Minimum X Emissions and Performance Data X
Maintenance Contract Proposal X Equipment Descriptions X
Maintenance Schedule X

Bid Security Enclosed X


Dated this 24th day of October, 2024.

Bidder Ziegler Inc

Address 901 W 94th Street

Bloomington, MN. 55420

Authorized Officer Jesse Keene

Signature 

Telephone No. 952-233-4312

E-mail jesse.keene@zieglercat.com