



## REQUEST FOR BOARD ACTION

ITEM NO. 15

**DATE OF MEETING:** July 27, 2015

**REQUESTED BY:** Michael G. Mack, Utilities Director

**SHORT TITLE:** Approval of a Purchase Order to Benjamin Heck Electrician for Purchase of 150 kW Backup Generator for Wastewater Treatment Plant Pump Station.

**BACKGROUND:** NCDENR rules require a backup generator at all electrical pumps and controls in both water and wastewater systems that normally run on commercial power in the event of a commercial power outage. Until the permanent generator for the WWTP that will be provided by the WWTP Contractor (RTD) is set in place sometime next year, PCU needs to provide a “temporary” backup generator to run the electrical wastewater pumps that will be set by the Phase I contractor into the pump station within the next two months. Currently, PCU is renting diesel powered pumps to run the pump station because of the delays in having the defective pump station wetwell replaced by the Phase I contractor (GRS). Once the permanent generator for the entire WWTP is installed, this generator will be used as an emergency backup generator for any PCU water or wastewater pump station or for other County emergency needs.

Three written quotes were received for a “trailer mounted” 150 kW generator with a 24 hour capacity fuel tank for mobile transportation and use. PCU received quotes from Cummins Atlantic, LLC (\$52,000 + tax); Power Pro-Tech Services (\$42,073.44 + tax); and Benjamin Heck Electric (\$38,900 + tax).

Funding for this purchase is included in the PCP-WWTP Capital Project Budget and no additional appropriation is required.

Staff is recommending award of the Purchase Order to Benjamin Heck Electric for a 150 kW trailer mounter generator in the amount of \$38,900.

PCP WWTP – Construction	88-407492	\$38,900
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**SPECIFIC ACTION REQUESTED:** To approve a Purchase Order in the amount of \$38,900 to Benjamin Heck Electric for a 150 kW Cummins Power Diesel Generator.

# QUOTE

Date: July 20, 2015  
Quote #4022

Benjamin Heck (Licensed Electrician)  
5285 Walden Ct.  
Southport, N.C. 28461  
910-477-0734  
[benheck@hotmail.com](mailto:benheck@hotmail.com)

TO:

Attn: Bryan McCabe, PE  
Project Engineer  
Pender County Utilities  
605 E. Fremont Street  
Burgaw, NC 28425  
[bmccabe@pendercountync.gov](mailto:bmccabe@pendercountync.gov)

SALESPERSON	JOB	EXPIRES	DUE DATE
Benjamin Heck	Pender County Diesel 150KW generator/ trailer	7-1-15	

QUANTITY	DESCRIPTION	UNIT PRICE	LINE TOTAL
1	Cummins Power Generation Diesel Generator model DCGAC rated 150kW Standby, 277/480 VAC, 3 Phase, 4 Wire Including options specified on additional attachment. Generator fully attached and centered on trailer for mobile transportation.		
1	New tandem axle 12,000 pound GVWR trailer with a full metal diamond floor, 225/75 D15 tires and 2 5/16 coupler ball, electronic axle brake and light package. Painted black.		
	• Delivery included to jobsite		
	• Diesel Fuel provided by Owner		

Subtotal	\$38,900.00
6.75% Sales Tax	\$2,625.75
<b>Total</b>	<b>\$41,525.75</b>

THANK YOU FOR YOUR BUSINESS!

## 150kw Diesel Generator Bill of Materials: Pender County

**One (1) Cummins Power Generation Diesel Generator Model DSGAC rated 150kW, 277/480v, 3-Phase, 4 Wire with the following options:**

### Description

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- U.S. EPA, Stationary Emergency Application
- 60Hz
- Duty Rating-Standby Power
- Listing-UL 2200
- Emission Certification, EPA, Tier 3, NSPS CI Stationary Emergency
- Enclosure-Steel, Weather Protective, with Exhaust System
- Wind Rating-150 MPH, Steel Housing
- Voltage-277/480,3 Phase,Wye,4 Wire
- Alternator-60Hz, 12 Lead, Broad Range, Full 1Ph Output, 125C
- GENSET CONTROL-POWERCOMMAND 1.1
- Exciter/Regulator-Pmg, 3 Phase Sensor
- Engine Governor-Electronic, Isochronous Only
- Control Mounting-Left Facing
- Meters-AC Output, Analog
- Alarm-Audible, Engine Shutdown
- RELAYS-Genset STATUS, USER CONFIGURED 12VDC
- Stop Switch-Emergency
- Circuit Breaker-250A, Left, 3P, 600/525V, TM, 80%, UL/IEC
- Listing, ULC-S601-07
- Fuel Tank-Dual Wall Subset, 24 Hour Capacity
- Separator-Fuel/Water
- Warning-Low Fuel Level
- Warning-Fuel in Rupture Basin
- Engine Starter - 12 VDC Motor
- Battery Charging Alternator-Normal Output
- Engine Cooling-High Ambient Air Temperature
- Shutdown-Low Coolant Level
- Extension-Engine Coolant Drain
- Engine Coolant-50% Antifreeze, 50% Water Mixture
- Coolant Heater-120 Volt Ac, Single Phase
- Engine Air Cleaner-Heavy Duty
- Genset Warranty- Base (2 Year / 400 Hours)
- Rack-Battery
- Extension-Oil Drain
- Battery Charger. 10amp-120/208/240Vac (60/50Hz)



Power Pro-Tech Services, Inc.  
 6361 Ocean Hwy E.  
 Winnabow, NC 28479  
 1-866-787-3431 Phone  
 910-253-0456 Fax

# Quote

Date                      Quote #  
 6/29/2015                17329

Generator Location

## CUSTOMER

Pender County Utilities

Site Name

Rep

Description	Qty	Cost	Total
150kW Trailer mounted generator, 480V, 3 phase, Level 1 enclosure, 250 gallon fuel tank		42,073.44	42,073.44

\*\*This quote does not include freight

Pender County Sales Tax		6.75%	2,839.96
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**Total                      \$44,913.40**

Signature \_\_\_\_\_

\*Not including applicable sales tax, shipping, mileage, and labor to install unless specifically quoted above.

This quote is valid for thirty days from the above date. All sales are final. No refunds, exchange or credits will be given on any equipment or parts.

*Mission Statement*  
 To Offer the Highest Quality Service and Most Compelling Economic Value to Companies that Rely on Emergency Power to Protect & Preserve the Welfare of their Customers, Employees and Business.

# BLUE STAR

## Power Systems Inc.

# Sales Quote

Quote Date: 6/26/2015 2:09:15 PM  
 Quote Number: 0005714-0  
 Project Title: Power Pro Tech JD150-01  
 Prepared for: Blue Star Power Systems

Unit Model	JD150-01	Standby / Prime	TPEM [Flex] Mobile Standby
kWe Rating	150 kWe	UL 2200 Listed	No
Fuel	Diesel	CSA Approved	No
EPA	Tier 3 TPEM [Flex]	Paint Color	White

**Engine Model:** John Deere 6068HF285 (FLEX) 150kW Standby Power Rating at 1800 RPM Governor - Electronic Isochronous

**Voltage:** 480/277V 3 Phase 60 Hz 0.8 PF

**Gen Model:** Marathon 431CSL6202 12 Lead Wired 480V 3 Phase High Wye 130°C Rise Over 27°C Ambient

**Voltage Regulator:** Marathon SE350 Automatic Voltage Regulator

**Control Panel:** Blue Star DGC-2020 Microprocessor Based Gen-Set Controller Mounted Facing Left from Generator End (Unless Specified Otherwise)  
 Standard Features: Low Oil Pressure, High Coolant Temp, Overspeed, Overcrank Shutdowns  
 Emergency Stop Pushbutton, Audible Alarm Buzzer with Silencing Switch  
 Optional Features Include: Generator Protection (Undervoltage, Overvoltage, Underfrequency, Overfrequency, Overcurrent)

**Control Panel Options:** Control Panel Battery Disconnect Switch

**Unit Color:** White

**Enclosure:** Level 1 (Weather Protective Enclosure) Powder Coated 14 Gauge Steel  
 Louvered Intake and Punched Exhaust Openings  
 Pitched Roof for Increased Structural Integrity and Improved Watershed  
 Lockable Handles Keyed Alike on Hinged Doors  
 Formed Steel Base with Mounting and Lifting Holes  
 Includes Vibration Mounts to Isolate Unit from Base Rail

**Cooling:** Unit Mounted Radiator (50°C Ambient)

**Oil Drain Extension:** Plumbed to Bulkhead Fitting in Base

**Mainline Breaker:** 225 Amp 3 Pole 600 Volt Breaker Mounted & Wired in a NEMA 1 Enclosure

**Jacket Water Heater:** Engine Block Heater 2000W 240VAC Rated for -20°F  
 Heater Installed with Isolation Valves and Wired to Terminal

**Air Cleaner:** Dry Single Stage

**Silencer:** Critical Grade Compact (CPJ Series) Silencer Mounted to Engine

**Battery:** 12 Volt System with Rack and Cables

**Battery Charger:** 12 Volt 6 Amp Mounted and Wired to Terminal

**Gen-Set Trailer Package:** T10000-2 Tandem Axle DOT Approved Trailer Package Including:  
 3" Pintle Eye, Safety Chains, Electric Brakes with Breakaway Kit  
 Radial Tires, Fenders, Adjustable Tongue Jack, Rear Stabilizing Jacks

**Trailer Package Options:** Lockable Cable / Storage Box

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Fuel Tank: 250 Gallon Single Wall Tank Including Supply & Return Connections  
Fuel Level Gauge and Fill & Vent Plumbing

Factory Test: Standard Commercial Testing Includes:  
Verification of Alarm Shutdowns, Voltage Settings, Block Loading to Rated kWe and PF

Owner's Manual: Print Copy (Qty 1)

Warranty: 2 Year / 2000 Hour Limited

Notes:

Additional Options  
(Not Included In Price):

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Unit Price (QTY 1)

Freight	Not Included
Installation	Not Included
Startup	Not Included
Sales Tax	To Be Determined

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### Total Price

Payment Terms: Net 30

Lead Time: 8-10 Weeks (Contingent on component availability)

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### Terms & Conditions

- This quote is valid for a period of 30 days.
  - This proposal is our interpretation of your requirement. It includes only the items listed on this quotation. Should there be other requirements or specifications, we will re-quote accordingly.
  - Units are shipped wet to include lube oil and 50/50 water and antifreeze mix unless otherwise noted in this quotation.
  - All extended piping, wiring, or other than listed above is performed by "others".
  - Seller is not quoting, offloading, job site startup, personnel instructions, field testing, or unit installation.
  - Quoted prices include normal testing, packaging, and instructional literature.
  - It is the distributor/purchaser and end user's responsibility to ensure that this equipment is operated in accordance with all applicable local, state, and federal laws and regulations governing the use and operation of this equipment.
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### Distributor Terms & Conditions

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Serving the Carolinas & Virginia with Branches in:  
Charlotte, Greensboro,  
Kenly  
Spartanburg, Columbia, Charleston, Myrtle Beach  
Roanoke, Richmond, Chesapeake

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## Cummins Atlantic, LLC

Date: September 2, 2014

3137 Hwy 701 S  
Loris, SC  
Office: (843) 877-1773  
E-mail: kenneth.luther@cummins.com

**Kenneth W. Luther, Jr.**  
**Power Generation**  
**Territory Manager**

Rev. 0

RE: Pender County Utilities

**One (1) Cummins Power Generation Diesel Generator model DSGAB rated 125KW  
Mobile, with the following options:**

### Description

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- 60Hz
- Duty Rating-Standby Power
- Listing-UL 2200
- Emissions-Compliance, TPPEM, EPA OEM Transition Program
- Enclosure-Steel, Weather Protective, with Exhaust System
- Wind Rating-150 MPH, Steel Housing
- Voltage-277/480, 3 Phase, 4 Wire
- Alternator-60Hz, 12 Lead, Broad Range, Full 1Ph Output, 125C
- GENSET CONTROL-POWERCOMMAND 1.1
- Exciter/Regulator-Pmg, 3 Phase Sensor
- Engine Governor-Electronic, Isochronous Only
- Control Mounting-Left Facing
- Stop Switch-Emergency
- Circuit Breaker-400A, Left, 3P, 600/690V, SS RMS, 80%, UL/IEC
- Separator-Fuel/Water
- Engine Starter - 12 VDC Motor
- Battery Charging Alternator-Normal Output
- Engine Cooling-High Ambient Air Temperature
- Shutdown-Low Coolant Level
- Extension-Engine Coolant Drain
- Engine Coolant-50% Antifreeze, 50% Water Mixture
- Coolant Heater-120 Volt Ac, Single Phase
- Engine Air Cleaner-Heavy Duty
- Genset warranty- Base, Standby 2 years / 400 hours, Prime Power 1 year / unlimited hours, Continuous Power 1 year / unlimited hours
- Rack-Battery
- Extension-Oil Drain
- Battery Charger-Stand Alone-15A(12V)/12A(24V)-120V-240V
- 24 hour diesel fuel tank



**Atlantic**

Serving the Carolinas & Virginia with Branches in:  
Charlotte, Greensboro,  
Kenly  
Spartanburg, Columbia, Charleston, Myrtle Beach  
Roanoke, Richmond, Chesapeake

- Battery disconnect, cam lock connections, shore power for battery charger and coolant heater

Net Package Price.....\$52,000.00  
+ tax

**Start-up & Testing**

- One hour building load test
- One hour O&M training
- Start-up & alarm verification with a factory trained technician

**Delivery**

- FOB factory with freight allowed to jobsite, offloading by others

**Notes and Clarification:**

- The above proposal is based on your verbal quotation request.
- Cummins Atlantic has not received any written specifications and/or drawings regarding this project.

**Terms and Conditions**

1. **Payment** - Terms are Net 30 Days at the time of shipment, based upon Cummins Atlantic's credit department approval, otherwise terms are C.O.D. Payment of invoice must be made in full prior to placing the equipment into service
2. **Retainage** - Retainage withheld on projects is not acceptable nor binding on Cummins Atlantic, unless accepted and confirmed in writing by an officer of Cummins Atlantic prior to order acceptance or shipment.
3. **Sales Tax** - Prices are quoted less any sales tax. Applicable sales tax will be added to our invoice. Resale tax certificates must be on file with Cummins Atlantic's credit department for tax-exempt sales, prior to invoicing.
4. **Warranty** - Cummins standard manufacturer's warranty applies as specified in our proposal. All buy out items not manufactured by Cummins, Inc. will be covered by the manufacturers' standard warranty provisions. Copies of non-Cummins manufactured equipment warranties are available upon request.
5. **Cancellation** - Cancellation charges may apply for orders cancelled, once placed and accepted by Cummins Atlantic. Cost of custom components, completed fabrication, or any other work performed will be added to the cancellation fee.
6. Cummins Atlantic is an equipment supplier only. No fuel, wiring, connecting, installation, plumbing or other type of installation type labor is included in this proposal, unless specifically noted herein.
7. The customer is responsible for any and all installation of the above equipment, unless specifically noted herein. Cummins Atlantic personnel will perform an installation audit prior to the start-up being completed. Any issues identified by the installation audit shall be corrected at the purchaser's expense prior to the start-up being accomplished.
8. All equipment required to perform any loading or unloading of the proposed equipment at the jobsite is the responsibility of the purchaser.
9. Cummins Atlantic limits the scope of supply for this quotation to the equipment and services listed in our bill of material. Equipment that is not specifically listed in our bill of material is to be provided by others. We have carefully detailed the equipment proposed in our bill of material. Please carefully review it to be certain it meets your requirements.
10. We reserve the right to correct any errors and omissions in our proposal.
11. Contracts which include liquidated damages or penalty clauses for failure to meet promised shipping dates are not acceptable or binding on Cummins Atlantic, unless accepted and confirmed in writing by an officer of Cummins Atlantic.
12. Cummins Atlantic standard terms and conditions are included in this quotation and hereby become part of any subsequent purchase order. These same terms and conditions need to be noted on any purchase order received by Cummins Atlantic.
13. Cummins Atlantic will not be responsible for any labor or materials charged by others associated with the start-up and installation of this equipment unless previously agreed upon in writing by Cummins Atlantic.
14. Quote is valid for 60 days from quote date.

I hereby accept and agree to the terms and conditions stated above and accept the proposal as quoted:

BY: \_\_\_\_\_

DATE: \_\_\_\_\_