APPROVED: 7/9/02

JUSTIFICATION FOR SOLE SOURCE AND/OR WAIVER PURCHASE

REQUISITION NUMBER	DATE 3/27/2013	
DEPARTMENT Utilities	BUSINESS UNIT	
SUGGESTED VENDOR		
Cummins Power South		
ITEM DESCRIPTION AND REASON FOR SOLE S (MAY ALSO BE ATTACHED AS A MEMO)	Source and/or Waiver:	
Item Description: emergency power system	m consisting of a generator (alternator ar	nd
diesel engine) and automatic transfer s	witch (ATS). Alternator and ATS rated 480)/277VAC,
3 phase, 4 wire, 60Hz.		
	a manufacturer who can supply all three co	-
	diesel engine, and ATS. Due to the critic	
	ponsibility needs to exist with the manufa	
	when there is an issue with the performan	nce of the
system as a whole. TECHNICAL CHARACTERISTICS:		
1. The starting power rating (sKVA) for	r a Cummins generator does not dip below 9	10%
of its rated voltage, when first starte	ed and brought under full load. Because o	of
this technical characteristic a Cummins	s generator does not need to be oversized,	•
saving the County money.		
2. Cummins alternators can be built wit	th a maximum temperature rise of 80°C. Bec	ause of
REASON FOR REQUESTING SOLE SOURCE:	erator does not need to be oversized for h	eat generation
(X) ITEM MUST MATCH EXISTING EQUIPMEN	IT, WHICH IS:	
???		
() ITEM IS A REPAIR PART FOR EXISTING EQ	QUIPMENT, WHICH IS:	
() ITEM IS TO BE ATTACHED TO EXISTING IT	TEM, WHICH IS:	

Revision Date:

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BECA the a cost	ECHNICAL CHARACTERISTICS OF REQUESTED ITEM ARE ESSENTIAL TO OUR NEEDS USE: 1) all components of the emergency power system are manufactured by Cummins in liternator, diesel engine, and automatic transfer switch; 2) reduction in capital of equipment because it doesn't have to be oversized; 3) reduction in life cycle cost se equipment is properly sized.
() No	O OTHER MANUFACTURER OF THIS TYPE OF PRODUCT EXISTS
	THER MANUFACTURERS OF THIS TYPE OF PRODUCT DO NOT MEET OUR MINIMUM IREMENTS:
	MANUFACTURER'S NAME: Kholer
	REASON: Does not manufacture all three components of emergency power system.
	Manufacturer's Name: Caterpillar
	REASON: Does not manufacture all three components of emergency power system.
	Manufacturer's Name: Detroit Diesel
	REASON: Does not manufacture all three components of emergency power system.
() O:	THER
	PERFORM PRICE OR COST ANALYSIS OR ATTACH NEGOTIATED PRICE QUOTE VENDOR; LETTER FROM MANUFACTURER STATING SOLE SOURCE. PRICE ANALYSIS PERFORMED
	BASED ON:
	The state of the s

Revision Date:

B)	COST ANALYSIS PERFORMED:	
	BASED ON:	
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	1944an	
	Per	MemoDatul 4-10-13 SIGNATURE AND TITLE OF REQUESTER (A.++++
	**************************************	SIGNATURE AND TITLE OF REQUESTER (A.++++
I,	Robert D. Trances	Lin. Authorized Buyer,
Conc	CLUDE THE FOLLOWING:	
WITH	Sole Source Justification is iout Competitive Bidding.	S ADEQUATE AND PURCHASE IS AUTHORIZED
Retu	() SOLE SOURCE JUSTIFICATION IS URNED TO DEPARTMENT.	S INADEQUATE AND REQUISITION IS
Сом	() DUE TO TIME RESTRAINTS PUR PETITIVE BIDDING.	CHASE IS AUTHORIZED WITHOUT
	() Competitive/Non-Competiti	VE BID WAIVER APPROVED.
<u> </u>	BUYER	PURCHASING DIRECTOR



INTEROFFICE MEMORANDUM FROM PUBLIC WORKS UTILITIES

•	Date:	April 10, 2013	
Bob Franceschini	From:	Pam Keyes	
Procurement Director		Utilities Director	
		Bob Franceschini From:	

SUBJECT: Sole Source Waiver – Emergency Power Systems (Generators and Automatic Transfer Switches)

Lee County Utilities would like to petition the Board to approve Sole Source Waiver for Cummins Power South, LLC to become the contract provider for Cummins Inc. and Cummins Power Generation Inc. manufacturer of all three components of an emergency power system: generator alternator, generator diesel engine, and automatic transfer switches.

Please see the enclosed:

• Justification for Sole Source for Cummins Power South, LLC.

• Letter from Cummins Power South, LLC confirming that they are the authorized distributor of Cummins Inc. and Cummins Power Generation Inc. equipment in Florida.

Account String: Budget Narrative:

OD Various departments Emergency Power Systems

(Costs includes freight & delivery)

Estimated Annual Expenditures:

\$500,000

Lee County has been using Cummins equipment for the past 15+ years. No other emergency power system supplier can lay claim to manufacturing all three components (alternator, diesel engine, and automatic transfer switch) of the system.

LCU would like to the sole source to be in effect until other vendors manufacture all three components of an emergency power system.

Please let us know if you require additional information to expedite this request.

L.C.



March 27, 2013

Ref: Unique Attributes Justifying the Specification of Cummins Power Generation as Single/Sole Source for Diesel Powered Industrial Generator Sets and Power Transfer Equipment

It is Cummins Power South belief that due to the high level of technology and the quality of its products that our diesel powered industrial generators and automatic transfer switches offer Lee County: 1) the lowest capital investment for new equipment; 2) lowest life cycle cost to maintain and operate equipment; 3) a single source of responsibility for this critical emergency based equipment. Please let this confirm that Cummins Power South, LLC is the only authorized Cummins Inc. and Cummins Power Generation Inc. distributer in your area.

Difficulty exists in evaluating the value of the equipment procured against the cost of equipment. Sometimes Cummins will lose a bid to a competitor when the technical requirements are based solely on kW rating, which is used to express the output power of engines or power consumption of the site. However when looking at **performance**, our competitors almost always have to upsize their offering. Comparing the upsized competitor's offering against our initial offering, our equipment will be the most economical. Please refer to the Performance Criteria section of this letter where we list and discuss performance criteria. We have also included an example at the end of this letter.

After the initial capital cost of procuring the equipment, the next concern is the lifecycle cost of the equipment, which often cost more than the initial cost of the equipment. The lifecycle cost is comprised of the cost to fuel the equipment, perform routine maintenance, buy replacement parts, and then replace the equipment when it no longer functions or is obsolete and replacement parts can no longer be obtained. A vicious cycle can occur when upsized equipment is used. First, it requires more fuel than necessary. Second, during routine maintenance it consumes more oil, larger filters, more coolant, etc. Third, because other than startup when the initial load is transferred, it operates outside of the load it was designed for, stressing the equipment increasing the likely hood of breakdowns and reducing the useful life of the equipment. Note that Cummins equipment has many features which protect and improve the longevity of its equipment. For a listing of those features please refer to the Protective & Longevity Features section of this letter.

A single source of responsibility, especially with critical emergency equipment, can often be the difference between that equipment working or not. No other competitor is one source for the engine, the generator and automatic transfer switch all manufactured under one roof. Most other generator manufacturers only manufacture either the alternator or the engine, but not both. Most generator manufacturers do not build a transfer Switch. When issues and problems arise in regards to these disparate pieces of equipment, often the owner is stuck in the middle

of the finger pointing, with no quick resolution in sight. For a listing of the features which highlight Cummins' single source responsibility please refer to the Single Source Responsibility section.

Performance Criteria:

- 1. The Cummins control is a single microprocessor based common control platform that manages both the alternator output voltage and the engine governing together. Cummins control concept of Power Command is the only manufacturer that provides this inherently superior performance in a microprocessor based design. The advantage of PCC is the same designer/manufacturer for the controls is also the designer/manufacturer of the alternator and the engine. This "all in house" standard allows for the control to be designed to provide the best possible performance of the overall genset. This effectively designed management system is a large advantage that no other competitor can match. This is especially important when dealing with large block loads such as motor starting. The control allows for adequate voltage dip to enhance the engine ability to minimize transients. The starting power rating (sKVA) for a Cummins generator will not dip below 90% of its sustained voltage, when first started and brought under full load.
- 2. Cummins offers the Industry's lowest Temperature rise alternator as standard. Cummins default offering, to comply with Lee County specifications will always be to provide an alternator design not to exceed a maximum temperature rise of 80 deg C over 40 deg C ambient. This allows the Cummins Alternator to operate at 52% of its allowable temperature. Because heat negatively affects the alternator and decreases its useful life, minimizing the heat is essential for reducing life cycle cost.

Protective & Longevity Features:

- 1. Amp-Sentry The only UL listed Utility Grade protective relay for the generator and generator conductors in the industry. Amp Sentry is part of Power Command Control and provides protection for the alternator and the downstream conductor against both overload and short circuit conditions. This preconfigured protection mimics the thermal damage curve of the alternator, providing the ultimate in reliability and power quality. Power Command Control with integrated Amp-Sentry protection is the only UL Listed and labeled utility grade protective relay available from any generator supplier. It is a standard feature in all of the Cummins PCC2100, PCC3200 and PCC3201 family of controllers, as well as the 2x and 3x controllers. Refer to the Proof of UL Listing section for proof of UL rating.
- 2. Power Command Controls Is a fully integrated control design between generator and the automatic transfer switches. Many generator and automatic transfer switch manufacturers do not make both pieces of equipment or the controls for both pieces of equipment. Often there are significant issues with how these disparate pieces of equipment work together. Such is not the case with Cummins.

Power Command Control - Cummins Power Generation emergency power systems feature our trademarked PCC or Power Command Controls. PCC is a digital product microprocessor based design, unique to only Cummins. Designed by Cummins engineers and built by Cummins in Cummins owned facilities, Instead of a patch worked marriage with bridging software or multiple vendor support, the PCC was created to work seamlessly with a Cummins engine ECM and Cummins transfer switch controllers in a fully integrated design to eliminate problems between the generator and the automatic transfer switch.

3. Cooling Systems – The Cummins design encompasses every product for "real world" and relevant applications. Our ratings as published are not extrapolated by theory assumed off on set of known values, but by testing, retesting and testing again. One example exclusive to Cummins is our cooling systems, there the operational temperature is based on true ambient, while most other other manufacturers rate their cooling systems on the air temperature at the radiator core inlet. The difference is that Cummins standards mandate that we measure air temperature several feet from the rear of the generator taking into account the heat rise of the air flowing across the engine and exhaust components. This is the true measurement, typically 12 to 18 degrees higher than "room" air, that most of our competitors use as a benchmark. Due to this allowance our radiator capacity is approximately 10 percent larger. The end result is an emergency power generation system that will perform and last. Our design, in taking in account the real world application is one of many examples why a Cummins system maintained and operated within standards will outperform and outlast all others under the same conditions with equal use.

Single Source of Responsibility:

- 1. Product Structure The Cummins Power Generation family of products offers a true "vertically integrated" power system. From the diesel engine to the transfer switch, every component is designed, manufactured, assembled, tested and warranted by a single manufacturing entity: Cummins Inc., and brought to market exclusively by Cummins Power Generation and the parent company's own distribution chain as Cummins Distributor.
 - Expounding on this unique value is the fact that a Cummins Diesel Generator system provides the owner a single/sole source of supply in terms of quality control. From our factory owned and trained repair and parts network up to the same factory owned and trained aftermarket and warranty service, the Cummins Power Generation solution includes a same source design, manufacturing, maintenance under warranty, OEM parts network and supply for the engine, alternator, controls, battery charger, transfer switch and network monitoring equipment. Once more, no other manufacturer can make claim to this approach to the market channel.
- Automatic Transfer Switches Cummins manufactures its own ATS line in-house from 40 to 1000 amps and provides traditional transfer switches and bypass isolation switches up to 4000 amps. The complete product line is assembled and tested at the Cummins Fridley, MN plant. Every "OT" series transfer switch in the Cummins product line, is equipped with

Power Command Control as standard for seamless plug & play integration to our PCC family of generator controllers. This feature will allow the transfer switch(s) and the generator to communicate across a plug and play network. With the OT series, not only can the operator at the ATS see the transfer switch status, but generator data as well. With options like the Cummins LonNet Interface, our Cummins communication networked data can be exported into Modbus RTU and imported by the customer's new or existing SCADA system. Cummins also offers remote communications as well with the iWatch system. Under aTCP/IP addressable protocol or by CDMA wireless, you can take command and control of your power generation system anywhere a windows based computer is installed.

- 3. Paralleling Distribution Switchgear Cummins also offers a line of fully integrated parallel switchgear systems in UL891 and UL1558 structure with full networking capability. Using circuit breakers made by every major manufacture to ease coordination of circuit protection devises, Cummins paralleling gear is not purchased from a 3rd party and brand labeled, but build instead in Cummins facilities, with Cummins controls for integrated operation with the Power Command series controller in plug and play design. Cummins switchgear as a Cummins design and built product provides the user with one source of supply, one warranty and one service organization for the entire power generation system from the service entrance to the generator and the transfer switch. Business Structure Cummins Power South, LLC (CPS) as a partnership owned entity of Cummins Inc & Cummins Power Generation, Inc .provides an Owner with direct connection to the factory. CPS is strictly governed by the policies of its business partner Cummins Inc. No other vendor can lay claim to a higher level of ethics and corporate citizenship than Cummins and its distributor partners.
- 4. Global Presence with Local Focus Cummins Inc. maintains a world-wide footprint in 17 countries over four continents. However, the true measure of any company's commitment to a given market is only as good as the track record they have "at home". In this, our strength at Cummins and CPS is widely known in Lee County.

Cummins support as offered though Cummins Power South in Fort Myers is unrivaled within Lee, Charlotte, Collier, Hendry or Glades Counties and our ties to the community extend strength beyond an active sales organization to a personal commitment of service and quality from all 15 of our highly trained and experienced staff within our Edison Avenue facility.

From this local and single location, our staff offers customers the benefit of over 100 years of combined expertise in the marine, commercial & industrial power generation system business from 10kW to 2.75MW. At CPS, we seek out and employ experts successful in their fields and known by their Industry peers for their expertise. Our in-house capabilities go beyond the sale to include design and application expertise on industrial, residential, commercial & institutional power generation systems, including the other systems needed to operate a power generation system including cooling & exhaust, fuel delivery and

storage systems, electrical design, project management, administrative management and the paralleling distribution switchgear.

Once more, from an in-house engine overhaul to helping our customers draft a new project overview, there is no other power generation dealer or reseller in Lee, Collier, Charlotte or Hendry Counties with the in-house capability and experience of Cummins Power South. In fact CPS in Fort Myers has experienced growth from calendar year 2009 to 2012 in our power generation systems business.

5. Customer Partnership - At CPS we don't have a customer list, Instead we maintain Business Partner Contacts. We call it such because we strive to create and maintain a symbiotic business relationship with every customer.

Parts -This partnership includes willingness to stock parts that our customers will need and use. With over \$500k in parts in Ft Myers and overnight access to Cummins Power South's main warehouse of over 5M in inventory. CPS should be able to provide the parts you require in a cost effective and timely fashion.

Rental Equipment - Cummins maintain over 15 megawatts of mobile generator power within the Cummins Power South network from Nashville to Miami. From 25 kilowatts to 2 megawatts, we can have the power of Cummins Rent equipment at your doorstep the day after you call or in most cases the same day. Cummins will always respond as quickly and efficiently to small or large kW rental needs in greater Lee County to minimize any facility down time.

6. Service – Commercial customers depend on the reliability of our product and services we provide. Our commitment extends more intently to specialized needs of local governmental entities as well. With infrastructure relying on Cummins to keep critical facilities, water and wastewater systems operational 24 hours a day 7 days a week 365 days a year. In this effort, we are vested in ensuring you the best possible product life cycle through our expert preventative maintenance programs. Using only Genuine Cummins OEM parts and the ability to respond using a network of our 5 other CPS locations in Florida, we can dispatch additional labor and expertise into Lee County for disaster response.

Sizing Example:

This example comes from the last phase of the North Lee County WTP Well field Expansion Project Phase 2B. Lee County's consultant listed the generator sizing requirements in their Technical Specification. Referring to Technical Specification 16013A, Part 2.01.A the generator size was to be 200kW continuous standby. The only performance criteria stated was "Capable of starting a 150hp motor at 100% load and limited to 300% inrush current."

Kohler won this bid and they provided their 200REOZJE diesel generator set rated 200kW Standby. In their submittal nothing was submitted which talked about voltage dip, however the following was evident:

- Generator engine is manufactured by John Deere.
- Alternator insulation class is type H, 130 deg. C temperature rise.

With further research the voltage dip would be approx. 96 volts which is 20% at 480 volts with a 3 phase inductive block load.

The Cummins offering for this bid met every requirement of the spec and did not take any exceptions. Cummins also offered an alternator with a 80C rating. Note that Cummins model DSGAB with a kW rating of 125 would of meet the same performance criteria and would have been substantially less in cost.

Proof of UL Listing for AmpSentry:





Industrial Control Equipment 15VV

PowerCommand 2100, 3200 or 3201 with integral AmpSentry™Protective Relay Enclosure Type I 15kV Maximum

AmpSentry Protective Relay provides overload protection of generator and feeder conductors from generator terminals, in accordance with the requirements of 2005 NFPA 70: National Electric Codes, Articles 240,21(G), 445.12(A), and 445.13 without the use of an additional protective device. Feeder conductors from generator terminals shall have ampacity no less than 100 percent of generator set rating.

A disconnect for the generator is required per 2005 NFPA 70; National Electric Code® Articles 225.31, 225.32, and 445.18 unless the driving means for the generator can be readily shutdown and the generator is not arranged to operate in parallel with another generator or source of voltage.

AmpSentry Protective Relay allows selective coordination of generator with a downstream instantaneous trip overcurrent protective device in accordance with the requirements of 2005 NFPA 70: National Electric Code, Articles 700.27 and 701.18. Verification of generator set electrical system coordination must be achieved by a coordination study.

NRGU E243454 Protective Relay 0098-8674



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