

STATE OF SOUTH CAROLINA)	BEFORE THE CHIEF PROCUREMENT
COUNTY OF RICHLAND)	OFFICER FOR CONSTRUCTION
)	
)	
IN THE MATTER OF:)	DETERMINATION
BID WITHDRAWAL OF ADLER)	
ELECTRIC SOUTH, LLC)	CASE NO. 2009-012
)	
SOUTH CAROLINA DEPARTMENT)	POSTING DATE:
OF JUVENILE JUSTICE)	FEBRUARY 23, 2009
)	
IRM GENERATOR PROJECT)	
STATE PROJECT N12-9587-JM)	
_____)	

This matter is before the Chief Procurement Officer for Construction (CPOC) pursuant to a request from Adler Electric South, LLC. (Adler) under the provisions SC Code Ann §11-35-1520(7) and SC Regulation 19-445.2085(A) to withdraw its bid on the IRM Generator Project Bid (“the Project”) for South Carolina Department of Juvenile Justice (DJJ). [Adler’s request and a subsequently submitted supporting affidavit is attached as Ex. A] Because DJJ has posted a Notice of Intent to Award a contract to Adler, any decision to allow Adler to withdraw its bid will necessarily require a determination pursuant to Regulation 19-445.2085(C)(8) that cancellation of the award is clearly in the best interest of the State.

CPOC FINDINGS

On January 22, 2009, DJJ received six bids to construct the Project. [Ex. B] Adler submitted the low bid of \$59,748. The next lowest bidder submitted a bid of \$71,450. In the invitation for bids and at the bid opening, DJJ advised bidders that it would post the Notice of Intent to Award a Contract on January 27, 2009.

After reviewing bids, Kevin Belka of Belka Engineering Associates, Inc., the engineer of record for the project, contacted Adler to inquire why Adler’s bid was significantly lower

than that of the other bidders.¹ Upon review of its bid, Adler determined that it bid a generator that did not meet the requirements of the invitation for bids. [See Adler Affidavit for generator quote; a copy of the requirements of the invitation for bids is attached as Ex. C] According to Mark Cotter, Physical Plant Manger for DJJ, Adler advised DJJ of its mistake prior to posting the Notice of Intent to Award but requested an opportunity to obtain a quote on the correct generator to determine if it could honor its bid. DJJ agreed to Adler's request but meanwhile January 27, 2009, the announced date for posting the Notice of Intent to Award came. According to Mr. Cotter, DJJ was unaware that it could extend the posting date and, therefore, posted a Notice of Intent to Award a Contract to Adler on that date. [Ex. D] Subsequently, Adler received a quote on the specified generator and advised DJJ that it could not honor its bid without significant loss. [See Adler Affidavit]

Since the value of the project was over DJJ's certification, DJJ advised Adler to submit a request to withdraw its bid to the CPOC. On February 5, 2009, the CPOC received Adler's request to withdraw its bid for a mistake that would cause it substantial loss. Subsequently, Adler submitted an affidavit under oath certifying that the documents submitted in support of its request were true and accurate copies of Adler's bid preparation materials actually used in the preparation of its bid.

DETERMINATION

After award but before performance, a bidder may only withdraw an inadvertently erroneous bid upon a written determination by the appropriate chief procurement officer (CPO) that under the facts withdrawal is appropriate and that cancellation of award is clearly in the best interest of the State. SC Code Ann § 11-35-1520(7); SC Regulation 19-445.2085(A) and (C)(8).

¹ Adler was not present at the bid opening.

Section 11-35-1520(7) states in part that:

“withdrawal of inadvertently erroneous bids after award... but before performance, may be permitted in accordance with regulations promulgated by the board. ... Except as otherwise provided by regulation, all decisions to permit the correction or withdrawal of bids, or to cancel awards or contracts, after award but before performance, must be supported by a written determination of appropriateness made by the chief procurement officers or head of a purchasing agency.”

In accordance with Section 11-35-1520(7), the board adopted Regulation 19-445.2085. Regulation 19-445.2085(A) states that:

“A bidder or offeror must submit in writing a request to either correct or withdraw a bid to the procurement officer. Each written request must document the fact that the bidder’s or offeror’s mistake is clearly an error that will cause him substantial loss. All decisions to permit the correction or withdrawal of bids shall be supported by a written determination of appropriateness made by the chief procurement officers or head of a purchasing agency, or the designee of either.”

Adler mistakenly used a quote for a generator that did not meet the requirements of the specifications. Moreover, Adler’s mistake will cause it substantial loss relative to the size of the project.

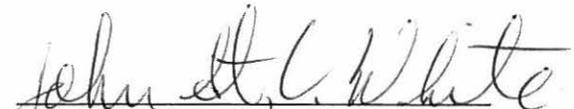
In a bid mistake case, the United States District Court for the District of South Carolina held that “A contract may be rescinded for unilateral mistake... when the mistake is accompanied by circumstances which would make it a great wrong to enforce the agreement and the nonmistaken party may be returned to the *status quo ante*.” National Fire Insurance Company of Hartford v. Brown & Martin, 726 F. Supp 1036, 1039 (D.S.C. 1989), affirmed 907 F.2d 1139 (4th Cir. 1990). While the Court’s holding was based on common law, not statutory and regulatory law, the Court relied on the fact that the contractor would suffer a substantial loss if it was not allowed to withdraw its bid after award but before performance.² The Court in Brown & Martin also held that under such circumstances, the contractor could withdraw its bid without forfeiting its bid bond. In this case, DJJ has not detrimentally changed its position in reliance on Adler’s bid.

² Brown & Martin made a \$68,900 mistake in submitting a low bid of \$588,912. Brown & Martin’s mistake was equal to 11.7% of its bid. In this case, Alder’s mistake is equal to 24% of its bid.

Upon withdrawal of the bid and cancellation of the award, DJJ will be in the exact same position it was in before posting the Notice of Intent to Award. On the other hand, to require Adler to honor its mistaken bid will cause Adler substantial loss. Under the circumstances, it is appropriate to allow Adler to withdraw its bid without forfeiting its bid bond.

Cancellation of award pursuant to Regulation 19-445.2085(C)(8) is appropriate when it is legally proper to allow the contractor to withdraw its bid as inadvertently erroneous. The withdrawal essentially renders the award null and void since there is no longer a bid on which to make an award. Moreover, cancellation of award will allow DJJ to proceed with award to the next lowest responsive and responsible bidder in a timely manner.³ Under the circumstances, it is in the best interest of the State to cancel the Notice of Intent to Award.

For the foregoing reasons, the CPOC hereby determines that it is appropriate to allow Adler to withdraw its bid as inadvertently erroneous without forfeiting its bid bond and to cancel the Notice of Intent to Award a Contract to Adler.


John St. C. White, P.E.
Chief Procurement Officer for Construction


Date

Columbia, South Carolina

³ The next low bidder's bid appears to be reasonable compared to other bidders. Indeed, using Adler's bid preparation sheet (including markups), if Adler had bid the proper generator, Adler would not have been the low bidder.

STATEMENT OF RIGHT TO ADMINISTRATIVE REVIEW

The South Carolina Procurement Code, in Section 11-35-4410, subsection (1)(b) states:

(1) Creation. There is hereby created the South Carolina Procurement Review Panel which shall be charged with the responsibility to review and determine de novo:

(b) requests for review of other written determinations, decisions, policies, and procedures arising from or concerning the procurement of supplies, services, information technology, or construction procured in accordance with the provisions of this code and the ensuing regulations; except that a matter which could have been brought before the chief procurement officers in a timely and appropriate manner pursuant to Sections 11-35-4210, 11-35-4220, or 11-35-4230, but was not, must not be the subject of review under this paragraph. Requests for review pursuant to this paragraph must be submitted to the Procurement Review Panel in writing, setting forth the grounds, within fifteen days of the date of the written determinations, decisions, policies, and procedures.

Copies of the Panel's decisions and additional information regarding the protest process is available on the internet at the following web site: www.procurementlaw.sc.gov

FILE BY CLOSE OF BUSINESS: Requests must be filed by 5:00 PM, the close of business. *Protest of Palmetto Unilect, LLC*, Case No. 2004-6 (dismissing as untimely an appeal emailed prior to 5:00 PM but not received until after 5:00 PM); *Appeal of Pee Dee Regional Transportation Services, et al.*, Case No. 2007-1 (dismissing as untimely an appeal faxed to the CPO at 6:59 PM).

FILING FEE: Pursuant to Proviso 83.1 of the 2008 General Appropriations Act, "[r]equests for administrative review before the South Carolina Procurement Review Panel shall be accompanied by a filing fee of two hundred and fifty dollars (\$250.00), payable to the SC Procurement Review Panel. The panel is authorized to charge the party requesting an administrative review under the South Carolina Code Sections 11-35-4210(6), 11-35-4220(5), 11-35-4230(6) and/or 11-35-4410(4). . . . Withdrawal of an appeal will result in the filing fee being forfeited to the panel. If a party desiring to file an appeal is unable to pay the filing fee because of hardship, the party shall submit a notarized affidavit to such effect. If after reviewing the affidavit the panel determines that such hardship exists, the filing fee shall be waived." 2008 S.C. Act No. 310, Part IB, § 83.1. PLEASE MAKE YOUR CHECK PAYABLE TO THE "SC PROCUREMENT REVIEW PANEL."

LEGAL REPRESENTATION: In order to prosecute an action before the Panel, a business must retain a lawyer. Failure to obtain counsel will result in dismissal of your appeal. *Protest of Lighting Services*, Case No. 2002-10 (Proc. Rev. Panel Nov. 6, 2002) and *Protest of The Kardon Corporation*, Case No. 2002-13 (Proc. Rev. Panel Jan. 31, 2003).

February 5, 2009

Mr. John White
Office of State Engineer
1201 Main Street, Suite 600
Columbia, SC 29201

Mr. Jamie Brown
Adler Electric South, LLC
202 Glen Knoll Drive
Columbia, SC 29229

RE: N12-9587-JM
IRM Generator Project

Mr. White:

Please consider this letter to be my formal request to withdraw my bid on the IRM Generator Project (N12-9587-JM). I am requesting this withdrawal in accordance with SC Consolidated Procurement Code 11-35-1520(7) and Regulation 19-445.2085.

I have enclosed for your review my original Bid Work Sheet, and the accompanying Quote I received for a "Generac" Generator. The Engineer of Record contacted me to inquire as to why my Bid was significantly lower than the rest of the field. Upon review, it was determined that the Generator I submitted on was not one that was approved. Only specific Manufacturers were approved as outlined on page 16231-2 of the Specifications.

Accordingly, I pursued a quote for a Generator that met Specifications. I have enclosed a copy of this quote for your review. The difference between the two Generator Quotes is in excess of fourteen thousand dollars. As a result of this error, I am requesting to withdraw my Bid to avoid substantial loss to my firm.

Should you have any questions, please feel free to contact me. Thank you for your time and trouble in this matter.

Respectfully,



Jamie Brown
Alder Electric South, LLC

Enc.

STATE OF SOUTH CAROLINA) AFFIDAVIT OF MISTAKE IN BID
COUNTY OF RICHLAND)

James D. Brown, Jr., personally appears before me, the undersigned officer duly authorized by the laws of South Carolina to administer oaths, and now on the 20th day of February, in the year 2009 at 2:10 pm pm/am of said day, being by me first duly sworn on his oath, deposes and says:

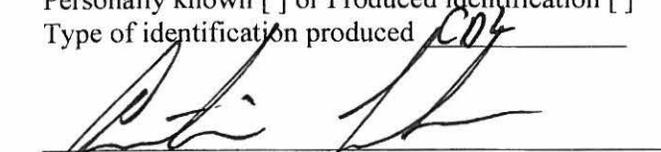
1. Affiant is the Vice President of Adler Electric South, LLC (Adler), a limited liability company, duly organized under the laws of the State of South Carolina.
2. On the twenty second day of 2009, Adler submitted a bid on South Carolina Project No. N12-9587-JM.
3. Said bid was inadvertently erroneous and the mistake in bid is an error that will cause Adler substantial loss.
4. Said mistake was not one of judgment but one of fact in that in bid preparation, Adler used a quote supplied to it by C.E.S. of West Columbia, South Carolina, for a generator that did not meet the requirements of the specifications contained in the invitation for bids.
5. Attached as Exhibit A is Adler's original bid work sheet used in the actual preparation of Adler's bid.
6. Attached as Exhibit B is a true and accurate copy of the C.E.S. quote Adler used in preparing its bid.
7. Attached as Exhibit C is a true and accurate copy of the C.E.S. quote Adler received after bid opening for a generator meeting the requirements of the specifications.
6. A review of these documents along with the specifications will show the nature of Adler's mistake.

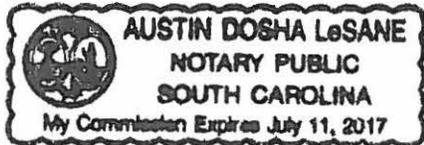
Further the deponent saith not.


(Signature of Affiant)

James D. Brown Jr.
(Printed name of Affiant)

Sworn to and subscribed before me
On this 20th day of Feb 2009
Personally known [] or Produced identification []
Type of identification produced COI


(Signature Notary Public)
Austin LeSane
(Printed name of Notary Public) Notary Public
Lexington County, South Carolina
My Commission expires 2
(Notary Seal)



RECEIVED

FEB 20 2009

OFFICE OF STATE ENGINEER

EXHIBIT A

Generator - 19,532.00 = 23,440.00
600A - 2345.00 = 2814.00
100A - 165.00 = 200.00

26,454.00

20% markup

Gas work = 3690²⁵ = 4,428.00

Pole work = 7,000 = 8500.00

Labor = 13,000

Generator wire = 2580.00

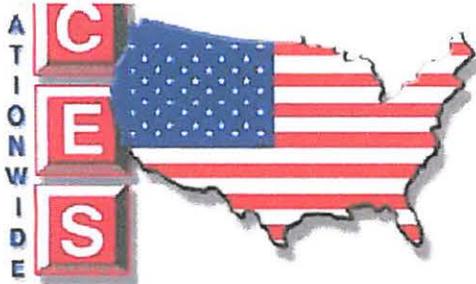
Generator pipe = 1400.00

Concrete = 1500.00

MISC wire, pipe, connectors = 1886.00

\$59,748.00

EXHIBIT B



C.E.S. (West Columbia)
738 Sunset Drive, West Columbia SC,
29169.

Phone: 803-796-3306
Fax: 803-926-0517
Email: ColumbiaWest0025@ces-us.net

QUOTATION

WCO/003229

Valid From: 31 Dec 2008
Valid Until: 30 Jan 2009

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ADLER ELECTRIC SOUTH LLC
202 GLEN KNOLL DRIVE
COLUMBIA, SC
29229
Phone: 803-315-7680
Fax: 803-462-0663

Delivery Details:
GENERATOR
NO START UP

Entered by: Frank Maples

Account No.: 00250414001
Order Number: SC DEPARTMENT OF
JUVENILE JUST

Generator used for Quote

Qty	Item	Description	\$ Price Per	\$ Goods
	GENERATOR FOR GENERAC			
1		QT08046GNSN 80KW GENERATOR		
1		HTSN300G3 TRANSFER SWITCH		
1	TOTAL	TOTAL	18254.15 1.	18254.15

Please do not hesitate to contact us if we can be of any further assistance.

Sincerely Yours,

Frank Maples

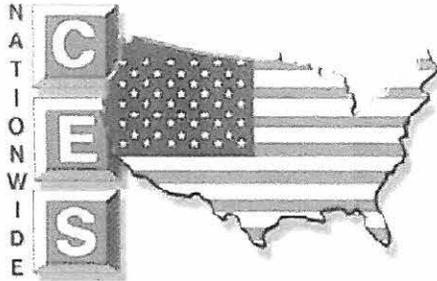
Goods Total: \$18254.15
Tax Total: \$1277.80
Total: \$19531.95

Prices may be subject to change from manufacturer at the time of dispatch. When ordering please use above quotation number.

Seller assumes no responsibility for quoted materials meeting job specifications unless specifically stated in writing.

Substitution of similar quality material is permitted. All special order material is non-returnable or subject to the manufacturer's return goods policy.

EXHIBIT C



C.E.S. (West Columbia)
 738 Sunset Drive, West Columbia SC,
 29169.

Phone: 803-796-3306
 Fax: 803-926-0517
 Email: ColumbiaWest0025@ces-us.net

*Proper Generator
 After bid*

QUOTATION

WCO/003364

Valid From: 29 Jan 2009
 Valid Until: 28 Feb 2009

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ADLER ELECTRIC SOUTH LLC
 202 GLEN KNOLL DRIVE
 COLUMBIA, SC
 29229
 Phone: 803-315-7680
 Fax: 803-462-0663

Delivery Details:
 CUMMINS

Entered by: Frank Maples

Account No.: 00250414001
 Order Number: SC DEPARTMENT OF
 JUVENILE JUST

Qty	Item	Description	\$ Price Per	\$ Goods
		GENERATOR 80KW, 100KVA VOLTAGE 120/208 ACV 3-PHASE GM 8.1L, GAS ENCLOSED, 60 HZ, 1800 RPM		
1	SNL80PG6	MTU ONSITE ENERGY MODEL		
1	ASCO 300	3003260C AMPS260		
1	TOTAL	TOTAL PRICE	31554.89 1	31554.89

Please do not hesitate to contact us if we can be of any further assistance.

Sincerely Yours,

Frank Maples

Goods Total: \$31554.89
 Tax Total: \$2208.85
 Total: \$33763.74

Prices may be subject to change from manufacturer at the time of dispatch. When ordering please use above quotation number.

Seller assumes no responsibility for quoted materials meeting job specifications unless specifically stated in writing.

Substitution of similar quality material is permitted. All special order material is non-returnable or subject to the manufacturer's return goods policy.

E&OE

**BID TABULATION FORM
BELKA ENGINEERING ASSOCIATES, INC.**

Project: SCDJJ – IRM Generator Bid Date: 1/22/09
State Project # N12-9587-LM Bid Time: 2:00 PM

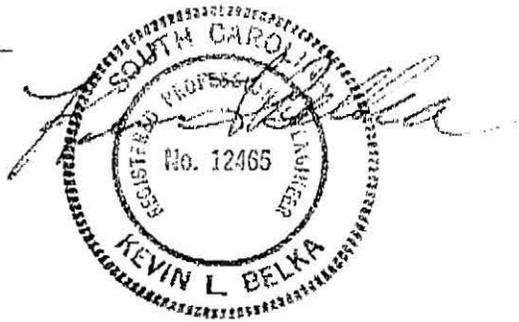
Bidder's Name	subcont.	Bid Security	# Addenda	Base Bid
Adler Electric	yes	yes	yes	\$59,748.00
Cashion Electricians	yes	yes	yes	\$94,120.00
DMB Electric	yes	yes	yes	\$71,450.00
Grow Electric	yes	yes	yes	\$95,800.00
H.R. Allen	yes	yes	yes	\$89,125.00
Pyramid Contracting	yes	yes	yes	\$93,998.00

I hereby certify that the above information is a true and accurate copy of the bid results on the above referenced project.

Kevin L. Belka, PE

Belka Engineering Associates, Inc

1/22/2009



Mark J. [Signature]
SC DJS
Physical Plant Manager

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EXH. C

SECTION 16231 - PACKAGED ENGINE GENERATORS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes packaged engine-generator sets for standby power supply with the following features:
 - 1. Gas engine.
 - 2. Unit-mounted cooling system.
 - 3. Unit-mounted control and monitoring.
 - 4. Outdoor enclosure.
- B. See Division 16 Section "Transfer Switches" for transfer switches including sensors and relays to initiate automatic-starting and -stopping signals for engine-generator sets.
- C. Generator shall be in place and operational before existing electrical service is renovated. Generator shall be used to back up IT functions during service renovation or a temporary generator shall be provided for that function. Outages shall be coordinated with Owner.

1.2 SUBMITTALS

- A. Product Data: For packaged engine generator and accessory indicated.
- B. Shop Drawings: Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
- C. Source quality-control test reports.
- D. Field quality-control test reports.
- E. Operation and maintenance data.
- F. Warranty: Special warranty specified in this Section.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- C. Comply with NFPA 70.2005.

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- D. Comply with UL 2200.
- E. Engine Exhaust Emissions: Comply with applicable state and local government requirements.
- F. Noise Emission: Comply with applicable state and local government requirements.

1.4 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of packaged engine generators and associated auxiliary components that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Caterpillar; Engine Div.
 - 2. Kohler Co.; Generator Division.
 - 3. Onan/Cummins Power Generation; Industrial Business Group.
 - 4. Spectrum Detroit Diesel.

2.2 ENGINE-GENERATOR SET

- A. Factory-assembled and -tested, engine-generator set.
- B. Mounting Frame: Maintain alignment of mounted components without depending on concrete foundation; and have lifting attachments.
- C. Capacities and Characteristics:
 - 1. Power Output Ratings: Nominal ratings as indicated, with capacity as required to operate as a unit as evidenced by records of prototype testing.
 - 2. Output Connections: Three-phase, four wire.
 - 3. Nameplates: For each major system component to identify manufacturer's name and address, and model and serial number of component.
- D. Generator-Set Performance:
 - 1. Steady-State Voltage Operational Bandwidth: 3 percent of rated output voltage from no load to full load.
 - 2. Transient Voltage Performance: Not more than 20 percent variation for 50 percent step-load increase or decrease. Voltage shall recover and remain within the steady-state operating band within three seconds.

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3. **Steady-State Frequency Operational Bandwidth:** 0.5 percent of rated frequency from no load to full load.
4. **Steady-State Frequency Stability:** When system is operating at any constant load within the rated load, there shall be no random speed variations outside the steady-state operational band and no hunting or surging of speed.
5. **Transient Frequency Performance:** Less than 5 percent variation for 50 percent step-load increase or decrease. Frequency shall recover and remain within the steady-state operating band within five seconds.
6. **Output Waveform:** At no load, harmonic content measured line to line or line to neutral shall not exceed 5 percent total and 3 percent for single harmonics. Telephone influence factor, determined according to NEMA MG 1, shall not exceed 50 percent.
7. **Sustained Short-Circuit Current:** For a 3-phase, bolted short circuit at system output terminals, system shall supply a minimum of 250 percent of rated full-load current for not less than 10 seconds and then clear the fault automatically, without damage to generator system components.

2.3 ENGINE

- A. **Fuel:** Natural gas.
- B. **Rated Engine Speed:** 1800 rpm.
- C. **Maximum Piston Speed for Four-Cycle Engines:** 2250 fpm (11.4 m/s).
- D. **Lubrication System:** The following items are mounted on engine or skid:
 1. **Filter and Strainer:** Rated to remove 90 percent of particles 5 micrometers and smaller while passing full flow.
 2. **Thermostatic Control Valve:** Control flow in system to maintain optimum oil temperature. Unit shall be capable of full flow and is designed to be fail-safe.
 3. **Crankcase Drain:** Arranged for complete gravity drainage to an easily removable container with no disassembly and without use of pumps, siphons, special tools, or appliances.
- E. **Engine Fuel System:**
 1. **Main Fuel Pump:** Mounted on engine. Pump ensures adequate primary fuel flow under starting and load conditions.
- F. **Coolant Jacket Heater:** Electric-immersion type, factory installed in coolant jacket system.
- G. **Governor:** Adjustable isochronous, with speed sensing.
- H. **Cooling System:** Closed loop, liquid cooled, with radiator factory mounted on engine-generator-set mounting frame and integral engine-driven coolant pump.
 1. **Coolant:** Solution of 50 percent ethylene-glycol-based antifreeze and 50 percent water, with anticorrosion additives as recommended by engine manufacturer.

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2. **Temperature Control:** Self-contained, thermostatic-control valve modulates coolant flow automatically to maintain optimum constant coolant temperature as recommended by engine manufacturer.
- I. **Muffler/Silencer:** Critical type, sized as recommended by engine manufacturer and selected with exhaust piping system to not exceed engine manufacturer's engine backpressure requirements.
 1. Minimum sound attenuation of 25 dB at 500 Hz.
- J. **Air-Intake Filter:** Heavy-duty, engine-mounted air cleaner with replaceable dry-filter element and "blocked filter" indicator.
- K. **Starting System:** 12-V electric, with negative ground.
 1. **Components:** Sized so they will not be damaged during a full engine-cranking cycle.
 2. **Cranking Motor:** Heavy-duty unit that automatically engages and releases from engine flywheel without binding.
 3. **Cranking Cycle:** 60 seconds.
 4. **Battery-Charging Alternator:** Factory mounted on engine with solid-state voltage regulation and 35-A minimum continuous rating.
 - a. **Battery Charger:** Current-limiting, automatic-equalizing and float-charging type. Unit shall comply with UL 1236.

2.4 CONTROL AND MONITORING

- A. **Automatic Starting System Sequence of Operation:** When mode-selector switch on the control and monitoring panel is in the automatic position, remote-control contacts in automatic transfer switch initiates starting and stopping of generator set. When mode-selector switch is switched to the on position, generator set starts. The off position of same switch initiates generator-set shutdown. When generator set is running, specified system or equipment failures or derangements automatically shut down generator set and initiate alarms.
- B. **Manual Starting System Sequence of Operation:** Switching on-off switch on the generator control panel to the on position starts generator set. The off position of same switch initiates generator-set shutdown. When generator set is running, specified system or equipment failures or derangements automatically shut down generator set and initiate alarms.
- C. **Configuration:** Operating and safety indications, protective devices, basic system controls, and engine gages shall be grouped in a common control and monitoring panel mounted on the generator set. Mounting method shall isolate the control panel from generator-set vibration.
- D. **Indicating and Protective Devices and Controls:**
 1. AC voltmeter.
 2. AC ammeter.
 3. AC frequency meter.
 4. DC voltmeter (alternator battery charging).
 5. Engine-coolant temperature gage.

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6. Engine lubricating-oil pressure gage.
7. Running-time meter.
8. Ammeter-voltmeter, phase-selector switch(es).
9. Generator-voltage adjusting rheostat.
10. Generator overload.
11. Low fuel pressure alarm.

E. Supporting Items: Include sensors, transducers, terminals, relays, and other devices and include wiring required to support specified items. Locate sensors and other supporting items on engine or generator, unless otherwise indicated.

2.5 GENERATOR OVERCURRENT AND FAULT PROTECTION

A. Generator Circuit Breaker: Molded-case, thermal-magnetic type; 100 percent rated; complying with NEMA AB 1 and UL 489.

1. Tripping Characteristic: Designed specifically for generator protection.
2. Trip Rating: 250 amperes.
3. Shunt Trip: Connected to trip breaker when generator set is shut down by other protective devices.
4. Mounting: Adjacent to or integrated with control and monitoring panel.

2.6 GENERATOR, EXCITER, AND VOLTAGE REGULATOR

A. Comply with NEMA MG 1.

B. Drive: Generator shaft shall be directly connected to engine shaft. Exciter shall be rotated integrally with generator rotor.

C. Electrical Insulation: Class H or Class F.

D. Stator-Winding Leads: Brought out to terminal box to permit future reconnection for other voltages if required.

E. Construction shall prevent mechanical, electrical, and thermal damage due to vibration, overspeed up to 125 percent of rating, and heat during operation at 110 percent of rated capacity.

F. Enclosure: Dripproof.

G. Instrument Transformers: Mounted within generator enclosure.

H. Voltage Regulator: Solid-state type, separate from exciter, providing performance as specified.

1. Adjusting rheostat on control and monitoring panel shall provide plus or minus 5 percent adjustment of output-voltage operating band.

I. Strip Heater: Thermostatically controlled unit arranged to maintain stator windings above dew point.

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- J. Windings: Two-thirds pitch stator winding and fully linked amortisseur winding.
- K. Subtransient Reactance: 12 percent, maximum.

2.7 OUTDOOR GENERATOR-SET ENCLOSURE

- A. Description: Vandal-resistant, weatherproof steel housing, wind resistant up to 100 mph (160 km/h). Multiple panels shall be lockable and provide adequate access to components requiring maintenance. Panels shall be removable by one person without tools. Instruments and control shall be mounted within enclosure.
- B. Engine Cooling Airflow through Enclosure: Maintain temperature rise of system components within required limits when unit operates at 110 percent of rated load for 2 hours with ambient temperature at top of range specified in system service conditions.
 - 1. Louvers: Fixed-engine, cooling-air inlet and discharge. Storm-proof and drainable louvers prevent entry of rain and snow.
 - 2. Automatic Dampers: At engine cooling-air inlet and discharge. Dampers shall be closed to reduce enclosure heat loss in cold weather when unit is not operating.

2.8 VIBRATION ISOLATION DEVICES

- A. Restrained Spring Isolators: Freestanding, steel, open-spring isolators with seismic restraint.
 - 1. Housing: Steel with resilient vertical-limit stops to prevent spring extension due to wind loads or if weight is removed; factory-drilled baseplate bonded to 1/4-inch- (6-mm-) thick, elastomeric isolator pad attached to baseplate underside; and adjustable equipment mounting and leveling bolt that acts as blocking during installation.
 - 2. Outside Spring Diameter: Not less than 80 percent of compressed height of the spring at rated load.
 - 3. Minimum Additional Travel: 50 percent of required deflection at rated load.
 - 4. Lateral Stiffness: More than 80 percent of rated vertical stiffness.
 - 5. Overload Capacity: Support 200 percent of rated load, fully compressed, without deformation or failure.

2.9 FINISHES

- A. Indoor and Outdoor Enclosures and Components: Manufacturer's standard finish over corrosion-resistant pretreatment and compatible primer.

2.10 SOURCE QUALITY CONTROL

- A. Prototype Testing: Factory test engine-generator set using same engine model, constructed of identical or equivalent components and equipped with identical or equivalent accessories.
 - 1. Tests: Comply with NFPA 110, Level 1 Energy Converters and with IEEE 115.
 - 2. Report factory test results within 10 days of completion of test.

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PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with packaged engine-generator manufacturers' written installation and alignment instructions and with NFPA 110.
- B. Install packaged engine generator to provide access, without removing connections or accessories, for periodic maintenance.
- C. Install packaged engine generator with restrained spring isolators having a minimum deflection of 1 inch (25 mm) on 4-inch- (100-mm-) high concrete base. Secure sets to anchor bolts installed in concrete bases. Concrete base shall be reinforced concrete construction extending at least 6" beyond perimeter of environmental enclosure in all directions. Base shall be at least 6" thick with #5 bars on 12" centers each direction.
- D. Electrical Wiring: Install electrical devices furnished by equipment manufacturers but not specified to be factory mounted.
- E. Piping installation requirements are specified in Division 15 Sections. Drawings indicate general arrangement of piping and specialties.
- F. Connect fuel, cooling-system, and exhaust-system piping adjacent to packaged engine generator to allow service and maintenance.
- G. Connect engine exhaust pipe to engine with flexible connector.
- H. Connect fuel piping to engines with a gate valve and union and flexible connector.
- I. Ground equipment according to Division 16 Section "Grounding and Bonding." Output ground and neutral shall not be bonded.
- J. Connect wiring according to Division 16 Section "Conductors and Cables."
- K. Identify system components according to Division 16 Section "Electrical Identification."

3.2 FIELD QUALITY CONTROL

- A. Perform tests and inspections and prepare test reports.
 - 1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.
- B. Tests and Inspections:
 - 1. Perform tests recommended by manufacturer and each electrical test and visual and mechanical inspection (except those indicated to be optional) for "AC Generators and for Emergency Systems" specified in NETA Acceptance Testing Specification. Certify compliance with test parameters.

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2. Perform a 4-hour load bank test at rated load.
 3. Battery Tests: Equalize charging of battery cells according to manufacturer's written instructions. Record individual cell voltages.
 - a. Measure charging voltage and voltages between available battery terminals for full-charging and float-charging conditions. Check electrolyte level and specific gravity under both conditions.
 - b. Test for contact integrity of all connectors. Perform an integrity load test and a capacity load test for the battery.
 - c. Verify acceptance of charge for each element of the battery after discharge.
 - d. Verify that measurements are within manufacturer's specifications.
 4. Battery-Charger Tests: Verify specified rates of charge for both equalizing and float-charging conditions.
 5. System Integrity Tests: Methodically verify proper installation, connection, and integrity of each element of engine-generator system before and during system operation. Check for air, exhaust, and fluid leaks.
 6. Exhaust-System Back-Pressure Test: Use a manometer with a scale exceeding 40-inch wg (120 kPa). Connect to exhaust line close to engine exhaust manifold. Verify that back pressure at full-rated load is within manufacturer's written allowable limits for the engine.
 7. Exhaust Emissions Test: Comply with applicable government test criteria.
 8. Voltage and Frequency Transient Stability Tests: Use recording oscilloscope to measure voltage and frequency transients for 50 and 100 percent step-load increases and decreases, and verify that performance is as specified.
 9. Harmonic-Content Tests: Measure harmonic content of output voltage under 25 percent and at 100 percent of rated linear load. Verify that harmonic content is within specified limits.
- C. Coordinate tests with tests for transfer switches and run them concurrently.
- D. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
- E. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- F. Remove and replace malfunctioning units and retest as specified above.
- G. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation resistances, time delays, and other values and observations. Attach a label or tag to each tested component indicating satisfactory completion of tests.
- 3.3 DEMONSTRATION
- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain packaged engine generators.

END OF SECTION 16231



SE-370 Notice of Intent to Award

07/01 Edition

EXH. D

AGENCY: South Carolina Department of Juvenile Justice
(Name)

PROJECT: N12 - 9587 - JM - Department of Juvenile Justice
(Number) IRM Generator Project *(Name)*

TO ALL BIDDERS:

The Agency has determined that the below-named Bidder is responsible in accordance with the requirements of the Bidding Documents and has submitted the lowest responsive Bid. The Agency hereby announces its intent to enter into a contract with this Bidder for the construction of the above-named Project, subject to the provisions of SC law.

NAME OF BIDDER: Adler Electric South LLC

DATE BIDS WERE RECEIVED: January 22, 2009

AMOUNT OF BASE BID: \$59,748.00

ALTERNATE(S) ACCEPTED: # None TOTAL: \$0.00

TOTAL AMOUNT OF BASE BID PLUS ACCEPTED ALTERNATE(S): \$59,748.00

Remarks: *(In accordance with Chapter 6 of the OSE Manual, explain any negotiations that resulted in a change in either the Base Bid or the accepted Bid Alternates)*

RIGHT TO PROTEST:

Any actual bidder, offeror, contractor or subcontractor who is aggrieved in connection with the intended award or award of this Contract may protest to the State Engineer in accordance with Section 11-35-4210 of the SC Code of Laws, as amended, within 15 days of the date the *Notice of Intent to Award* is posted.

January 27, 2009
(Signature of Awarding Authority) *(Date Posted)*

Mark R. Cotter Physical Plant Manager
(Print or Type Name of Awarding Authority) *(Awarding Authority Title)*

INSTRUCTIONS TO AGENCY:

1. MAIL A COPY OF THE FINAL BID TABULATION TO ALL BIDDERS AND OSE WITHIN 10 DAYS OF BID OPENING.
2. POST A COPY OF THIS FORM ON THE DATE AND AT THE LOCATION ANNOUNCED AT BID OPENING.
3. MAIL A COPY OF THIS FORM TO ALL BIDDERS AND THE OSE.