

Quality. Delivered.

Truckee Meadows Water Authority Accounts Payable PO Box 30013 Reno NV 89520-3013

Nevada Energy Systems Inc PO Box 10083 Reno NV 89510

VENDO.

Purchase Order

Page 1 of 1

PO Accounting Date:

6/13/2017

THIS NUMBER MUST APPEAR ON ALL INVOICES, PACKAGES AND SHIPPING PAPERS.

Order#

PO-002920

Delivery must be made within doors of specified destination.

Truckee Meadows Water Authority 1355 Capital Blvd Reno NV 89502

R					Ö				
Requester Contact Name				Requester Contact Phone Number				Vendor Number	
								000240	
	Date Ordered	Date Requested			Freight Meth	od/Terms			
	6/13/2017	8/15/2017							
Line a	# De	escription/Part No.	Qty	UOM	Unit Price	Discount A	mount	Extended Price	
	Mediyiiii	is Purchase - NRS 332 o. 2017-012 - Awarded to onsive Bidder Able to fications blic Bid) 80-3010 - Requestor K	105000 00		4.00			\$405,000 no	
1	Supplies		125329.00	usd	1.00			\$125,329.00	
	Mark Foree General Mana								

Truckee Meadows Water Authority's Terms and Conditions shall govern this and all related transactions, review them at http://tmwa.com/docs/po_terms_and_conditions.doc

This Purchase Order number must be indicated on all invoices, cartons and packing slips.

PO Total \$125,329.00

PURCHASE AGREEMENT (NRS 332)

GENERATOR ADDITIONS PURCHASE TMWA Bid No.: 2017-012 TMWA Capital Project No.: 13-0024

WITNESSETH, that TMWA and the Supplier, for the consideration hereinafter named, agree as follows:

Article 1 Scope of Work

The Supplier shall provide all all labor, materials, equipment/products, and incidentals required for supplying (1) 30 kW and (3) 60kW, 480Y/277V, 3-phase, diesel engine driven backup power generator sets (Generators) as provided in the specifications and provide all of the equipment and services described in the specification prepared by TMWA (Exhibit "A" attached hereto) and as amended by specific addenda, and shall do everything required by this Agreement in furnishing the Generators.

Delivery of the Generators shall be to TMWA's Capital Boulevard Warehouse located at 1355 Capital Boulevard, Reno, Nevada 89502.

Article 2 Contract Time, Guaranteed Delivery Date, and Liquidated Damages

Supplier agrees to deliver the Generators, in a good and satisfactory condition, pursuant to the Specification to the TMWA Capital Boulevard Warehouse located at 1355 Capital Boulevard, Reno, Nevada 89502 no later than **Sixty-Three (63) Calendar Days** following the issuance of the Notice to Proceed, unless otherwise agreed to between the parties, which is the Guaranteed Delivery Time as defined in the Bid Package.

TMWA and Supplier recognize that time is of the essence of this Agreement.

Article 3 The Contract Sum

TMWA shall pay Supplier, as full compensation for furnishing the Generators, services, and other specified items in accordance with the Contract Documents and to the satisfaction of TMWA, the lump sum amount of: One Hundred Twenty-Five Thousand Three Hundred Twenty-Nine (\$125,329.00) Dollars

Article 4 Payment

Payment for the Generators described on the Bid Schedule will be made within 30 days of the later of: i) inspection by TMWA and acceptance of delivery of such Generators; or ii) receipt of an invoice for the Generators.

Article 5 Acceptance and Final Payment

Testing and acceptance of the Generators shall be as specified in the Specifications, Bid and Contract Documents. Acceptance of final payment by the Supplier shall constitute a full waiver and release by the Supplier of all claims against TMWA arising out of or relating to this Agreement.

Article 6 The Contract Documents

The following is an enumeration of the Contract Documents that are fully a part of the Contract as if herein repeated:

- 1. Bid Documents and Bid Form
- 2. Agreement
- 3. Specifications
- 4. Addenda

Article 7 Warranty

Supplier warrants that the Generators furnished under the Contract will be of good quality and new and that the Generators will be free from defects and will conform with the requirements of the Specifications, Bid and Contract Documents.

Article 8 Indemnification/Hold Harmless

Notwithstanding any provision to the contrary in the Contract Documents, TMWA waives any requirement that the Supplier on this bid provide insurance (other than property insurance insuring risk of loss until delivery and acceptance by TMWA) in connection with the delivery of the Generators.

Article 9 Performance Bond – NOT REQUIRED FOR THIS PROJECT

Article 10 Termination

In addition to other provisions of this Agreement, TMWA may terminate the Agreement in accordance with the procedures specified in the Bid Documents, Bid Form, Specifications and Contract upon giving Supplier seven (7) day notice in writing.

Article 11 Governing Law

This Agreement shall be governed by, interpreted under and construed and enforced in accordance with the laws of the State of Nevada, with venue in the County of Washoe. Each of the parties hereto acknowledge and agree that the laws of the State of Nevada and the selection of venue in the County of Washoe were freely chosen by the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

	TRUCKEE MEADOWS WATER AUTHORITY
Dated:, 20	By: Mull Free General Manager
	ATTEST:TMWA Clerk
Dated: JUNE 6, , 2017	Supplier: Nevada Energy Systems, Inc. P.O. Box 10083 Reno, NV 89510
	By: Sandy I odaio
	Name: SANOY TOdaro
	Name: SANDY Todaro Title: COOWNER
STATE OF NEVADA) ss:	
COUNTY OF WASHOE)	
On this 6 day of JUNG Public, SAND TO CARD the foregoing Agreement for Equi Supplier.	
	Notary Public
RICHARD D. ABEND Notary Public - State of Nevada Appointment Recorded in Washon County	1.00m.y 1 mone

No: 93-1623-2 - Expires January 12, 2020

ATTACHMENT "A"

Master Form Equipment Purchase Rev. 7.29.13



SECTION 26 32 13.13

DIESEL-ENGINE-DRIVEN GENERATOR SETS

EQUIPMENT PURCHASE SPECIFICATION

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes diesel engine generator set, exhaust silencer and fittings, enclosure, fuel fittings, base fuel tank, battery, and charger.

1.2 REFERENCES

- A. National Electrical Manufacturers Association:
 - 1. NEMA 250 Enclosures for Electrical Equipment (1000 Volts Maximum).
 - 2. NEMA AB 1 Molded Case Circuit Breakers and Molded Case Switches.
 - 3. NEMA ICS 10 Industrial Control and Systems: AC Transfer Switch Equipment.
 - 4. NEMA MG 1 Motors and Generators.
- B. International Electrical Testing Association:
 - 1. NETA ATS Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
- C. National Fire Protection Association:
 - 1. NFPA 30 Flammable and Combustible Liquids Code.
 - 2. NFPA 110 Standard for Emergency and Standby Power Systems.

1.3 SYSTEM DESCRIPTION

- A. Description: Standby diesel engine driven generator set to serve continuously during interruption of prime electrical power and required auxiliaries, accessories, and controls to provide source of power, as specified herein, and in accordance with NFPA 110.
- B. Capacity: Reference Bid Schedule for required kW.

1.4 SUBMITTALS

A. Shop Drawings: Indicate electrical characteristics and connection requirements. Include plan and elevation views with overall and interconnection point dimensions, fuel consumption rate curves at various loads, ventilation and



- combustion air requirements, electrical diagrams including schematic and interconnection diagrams.
- B. Product Data: Submit data showing dimensions, weights, ratings, interconnection points, and internal wiring diagrams for engine, generator, control panel, battery, battery rack, battery charger, enclosure, vibration isolators and base tank.
- C. Test Reports: Indicate results of performance testing.
- D. Manufacturer's Field Reports: Indicate inspections, findings, and recommendations.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: Submit instructions and service manuals for normal operation, routine maintenance, oil sampling and analysis for engine wear, and emergency maintenance procedures.
- B. Manufacturer's Warranty: Submit written manufacturer's warranty for on-site parts and labor.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience, and with service facilities within 50 miles of Reno, Nevada.
- B. Supplier: Authorized distributor of specified manufacturer with minimum three years documented experience.

1.7 WARRANTY

- A. 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.
- B. Warranty Period: Two (2) years from date of successful generator startup, not to exceed 90-days from date of delivery.

1.8 MAINTENANCE SERVICE

A. Furnish service and maintenance of engine generator for one year from date of successful generator startup, not to exceed 90-days from date of delivery.



1.9 MAINTENANCE MATERIALS

A. Furnish two of each: fuel, oil and air filter elements.

PART 2 - PRODUCTS

2.1 SERVICE CONDITIONS

- A. Engine generator system shall withstand the following environmental conditions without mechanical or electrical damage or degradation of performance capability:
 - 1. Ambient Temperature: -20 to 115 deg F (-29 to 46 deg C)
 - 2. Relative Humidity: Zero to 95 percent
 - 3. Altitude: Sea Level to 4,500 feet

2.2 ENGINE

- A. Manufacturers:
 - 1. John Deere
 - 2. No Equal
- B. Product Description: Water-cooled in-line or V-type, four-stroke cycle, compression ignition Diesel internal combustion engine.
- C. Rating: Sufficient capacity to operate under 110% of nameplate rating for one hour in specified ambient environmental conditions.
- D. Fuel System: ASTM D 975 diesel fuel oil, Grade 2-D S15.
- E. Engine speed: 1800 rpm.
- F. The certified horsepower of the engine shall provide a minimum bhp required per kW at the specified ambient temperature, elevation and rated speed.
- G. Safety Devices: Engine shutdown on high water temperature, low oil pressure, overspeed, and engine overcrank. Limits as selected by manufacturer.
- H. Engine Starting: 12-volt DC starting system with positive engagement of sufficient capacity to crank the engine at starting speed for one minute without overheating, number and voltage of starter motors in accordance with manufacturer's instructions.
- I. Automatic Engine Control: An automatic engine control shall be supplied which will start/stop the generator set in response to an external position two wire, closed to run, open to stop switch. The engine control will incorporate solid

(3)

state, instantaneous reset, adjustable timers. All engine control contacts will be 10-amp capacity. All relays shall be of the plug-in enclosed type. Engine Control Switch: Three position (Automatic – Off – Manual). A cyclic, adjustable overall cranking cycle of 60 to 120 seconds with crank and reset periods adjustable from 10 to 30 seconds. Engine safety shutdown controls to shut the engine down in the event of high jacket water temperature; low lubrication oil pressure; over-crank (failure to start); overspeed; or loss of coolant.

- J. Engine Jacket Heater: Thermal circulation type water heater with integral thermostatic control and isolation ball valves, sized to maintain engine jacket water between 120 degrees F and 140 degrees F to assure rapid starting (10 seconds or less) under the specified ambient temperature range.
- K. Radiator: A unit mounted radiator using a coolant solution of 50 percent ethylene-glycol-based antifreeze and 50 percent water, with blower type fan, sized to maintain safe engine temperature in specified ambient temperature range. Radiator air flow restriction 0.5 inches of water (1.25 Pa) maximum. The cooling system shall be supplied with corrosion inhibitor. A radiator duct adapter shall be provided to allow for direct exhausting of used cooling air.
- L. Engine Lubrication System: The engine shall be furnished with a gear type lube oil pump that will furnish oil pressure to moving parts. Full flow lube oil filters shall be provided in addition to a bypass valve that will allow lube oil circulation in the event of a failure of the filtering system. Lube oil shall be provided as recommended by the engine manufacturer for job conditions.
- M. Engine Accessories: Fuel filter, lube oil filter, intake air filter, lube oil cooler, fuel transfer pump, fuel priming pump, gear-driven water pump.
- N. Mounting: Furnish unit with suitable spring-type vibration isolators and mount on structural steel base tank.
- O. Engine Exhaust Emissions: Certified to EPA Tier 3 requirements.

2.3 ALTERNATOR (GENERATOR)

- A. Manufacturers:
 - 1. Marathon Electric Generators
 - 2. No Equal
- B. Product Description: The power generator shall be of the salient pole synchronous type and temperature rise not to exceed 130 degrees C. The generator shall be equipped with amortisseur winding. Winding pitch shall be 2/3. The generator shall be of single bearing flange-mounted design. The



bearing shall be a laminated, steel, semi-flexible, piloting type. Excitation system shall be PMG type. Insulation class shall be in accordance with the most current NEMA MG1-22.40 requirements for the generator. The generator shall be provided with a power terminal cabinet of adequate size for connection of load conductors.

- C. Rating: Reference Bid Schedule for required kW, at 0.8 power factor, 480Y/277 volts, 60 Hz at 1800 rpm.
- D. Insulation Class: H
- E. Temperature Rise: 130 degrees C Standby.
- F. Enclosure: Skid Mounted Unit.
- G. Voltage Regulation: Furnish generator mounted volts per hertz exciter-regulator to match engine and generator characteristics, with voltage regulation plus or minus 1 percent from no load to full load. Voltage regulator shall be of the solid state type. The steady state voltage stability shall remain within a 0.5% band or rated voltage. Steady state voltage modulation shall not exceed one cycle per second. The regulator printed circuit board and power control diodes shall be hermetically sealed for moisture protection. Voltage regulator shall be a standalone unit and not integrated into the generator control panel.

2.4 GOVERNOR

A. Product Description: Electronic governor to maintain engine speed at precise isochronous control and rated frequency operation to within 0.25 percent, steady state, and 5 percent, no load to full load, with recovery to steady state within 2 seconds following sudden load changes. The governor shall not permit frequency modulation (defined as the number of times per second that the frequency varies from the average frequency in cyclic manner) to exceed ¼ cycle per second. Governor shall be a stand-alone unit and not integrated into the generator control panel.

2.5 ENGINE-GENERATOR CONTROL PANEL

- A. Manufacturer and Model:
 - 1. Deep Sea 7420 digital microprocessor controller
 - 2. No Equal

2.6 ACCESSORIES

A. Skid-Mounted Fuel Tank: Capable of providing 24 hours of fuel capacity at full load with fill and vent. The fuel storage tank, fittings, gauges and piping shall be supplied and installed by the manufacturer in accordance with NFPA, applicable



local codes, and as specified herein. The tank shall be of 12-gauge steel construction complete with baffles, drain, fuel inlet, return connections, vent, fill cap fuel level gauge, and rupture basin. The sub base tank shall be UL approved, complete with leak alarm and fuel level light. The sub base tank shall have an opening to allow for conduit entry. The leak alarm shall be wired into the common alarm signal.

- B. Sound-Attenuated, Weather-Proof Enclosure:
 - 1. Sound level measured at a distance of 23 feet from exhaust discharge after installation is complete shall be as specified in the Bid Schedule.
 - 2. Be vandal resistant and lockable with three-point handle operated latches. The use of a key shall be required to access or operate the equipment.
 - 3. The roof shall have a positive camber for water runoff. The exhaust outlet(s) shall be supplied with rain guards at least 1-inch above the enclosure to prevent moisture from entering the enclosure.
 - 4. Air openings shall include fixed louvers sized to allow proper air flow.
 - 5. The enclosure shall be prepped and primed with self-etching primer suitable for the material used in the construction of the enclosure. Final coating shall be powder coat. Submit color sample chips of standard and premium industrial colors for color selection. Final enclosure exterior color selection shall be by owner.
- C. Battery: Heavy duty 12VDC, diesel starting type lead-acid storage battery, provided with sufficient capacity to provide a minimum of three cycle starts. A battery rack shall be furnished of acid resistant material of the unit mounted type. Battery starting cables shall be furnished, of adequate size and length.
- D. Battery Charger: An automatic, minimum 3-amp solid state battery charger shall be supplied with fused input and output in a NEMA 1 enclosure for mounting within the generator enclosure. The charger will be SCR controlled and solid state to eliminate mechanical contact problems. The charger printed circuit board shall be easily replaceable and shall contain high and low adjustable charge rate potentiometers, ammeter, and charger status (power) light.
- E. Line Circuit Breaker: Reference Bid Schedule for Amperage Rating, 480 Volt, 3 phase, NEMA AB 1, molded case circuit breaker on generator output with integral thermal and instantaneous magnetic trip in each pole. Unit mount in enclosure to meet NEMA 250, Type 1 requirements.

PART 3 - EXECUTION

3.1 MANUFACTURER'S FIELD SERVICES

A. Prepare and start up engine-generator assembly.



- B. Furnish 2 hours of instruction each for two persons, to be conducted at project site with manufacturer's representative.
- C. Describe loads connected to standby system and restrictions for future load additions.
- D. Simulate power outage by interrupting normal source, and demonstrate system operates to provide standby power.

END OF SECTION 26 32 13.13