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ATTACHMENT A - STATEMENT OF WORK

GENERATOR PREVENTATIVE MAINTENANCE SERVICES

RFP NO.: DMS-20/21-130

THE STATE OF FLORIDA

DEPARTMENT OF MANAGEMENT SERVICES

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SECTION 1. STATEMENT OF WORK

The Contractor shall provide semi-annual and annual preventative maintenance service for the generator engines, sets, and fire pump as identified in Attachment C – Facility List. All services shall be provided in accordance with the requirements specified in the following sections of this RFP and must meet or exceed the service levels described in these sections.

1.1 Equipment Location

See Attachment C – Facility List.

1.2 Equipment Type

See Attachment C – Facility List.

1.3 Service Times

All services, unless otherwise coordinated and approved by the Contract Manager and/or their designee, shall be conducted during normal working hours, Monday through Friday, 7:00 a.m. until 5:00 p.m.

1.3.1 Scheduling

Annual and semi-annual maintenance schedules will be provided to the Facility Manager at least seven (7) working days in advance by e-mail, and a phone call reminder or e-mail at least twenty-four (24) hours prior to being on-site.

1.3.2 Response Time (Emergency)

A service technician will be on-site within two (2) hours of notification to assess problem(s) and determine corrective actions. The Facility Manager or designee shall be advised of all findings.

1.4 General Site Procedures

For each visit to a site to perform work under this Contract, the Contractor's staff shall report to the Department's Facility Manager or designee without fail. The Contractor shall give a minimum of 24 hours advance notice to the Department's Facility Manager before visiting a facility. The Contractor's technician shall fill in and update the site service log for the generator/fire pump engine upon each visit regardless of whether the visit is for preventative maintenance or repair service.

SECTION 2. CONTRACTOR DELIVERABLES

The Contractor shall be responsible for providing preventative maintenance service (semi-annual and annual) for engine and generator sets identified in Attachment C, Facility List. All services shall be provided in accordance with the requirements specified in the following sections of this Statement of Work and must meet or exceed the service levels described in these sections. General maintenance guidelines are from the NFPA (National Fire Protection Association) 110, Sections A.8.1 through A.8.4.9 "Standard for Emergency and Standby Power Systems 2017 Edition", or the most recent edition adopted by the State of Florida.

2.1 Annual Maintenance Service

The Contractor shall provide annual inspection and preventive maintenance services of equipment during February, March, April, or May or by a maintenance schedule provided by the Contract Manager or their designee. Annual maintenance shall include all of the requirements of Section 2.2, Semi-Annual Maintenance Service, along with the following additional services:

2.1.1 Oil and Oil Filters

- Change the oil and filters in all generators to conform to manufacturer's specifications that shall be done annually and/or every one hundred (100) hours of operation, whichever occurs first. Only manufacturer's approved oil and filters shall be used.

2.1.2 Lubricating System

- Change governor oil (where applicable)
- Change injection pump oil (where applicable)
- Change oil in crankcase breather (where applicable)
- Take oil sample; send to laboratory for analysis; provide a copy of the report to the Contract Manager and Facility Manager within thirty (30) days from the service date.

2.1.3 Fuel Delivery System

- Lubricate the day tank float switch and manual pump (where applicable)
- Replace fuel filters
- Lubricate carburetor and linkage (where applicable)
- Lubricate governor linkage and service air filters

2.1.4 Cooling System

- Replace water filters (where applicable)

2.1.5 Battery

- Load test and replace every three (3) years, regardless of condition.

2.1.6 Exhaust System

- Drain condensation where possible
- Check and lubricate heat riser plate

2.1.7 Ignition System

- Replace plugs (where applicable)
- Replace points (where applicable)
- Replace condenser (where applicable)
- Replace rotor (where applicable)
- Inspect cap, replace as necessary (where applicable)
- Lube point cam (where applicable)
- Lube advance wick (where applicable)
- Lube upper and lower bearing
- Set timing
- Inspect and lube mechanical advance (where applicable)
- Inspect wires

2.1.8 Generator

- Clean rings and commutator
- Lubricate over speed switch
- Check diode heat sinks
- Inspect rear bearing

2.1.9 Engine Running

- Test Low Oil Pressure safety switch and record seconds to shutdown
- Test High Engine Temperature safety switch and record seconds to shutdown
- Test Over Speed Safety switch and record seconds to shutdown
- Check pre-alarms (where applicable)
- Check over crank system and record seconds to shutdown
- Check cycle cranker time and record seconds of cranking; seconds of rest

2.1.10 Accessories

- Lubricate all hinges, door locks, and snap covers, etc.

2.1.11 Loadbank Test

- Loadbank (resistive and reactive) test each generator under full-rated load for at least two (2) hours
- Record of all operating systems of the alternator and the engine during the loadbank test
- Provide a complete written report of the loadbank test to the Contract Manager and Facility Manager or designee for each generator set.

2.2 Semi-Annual Maintenance Service

The Contractor shall provide semi-annual inspection and preventive maintenance services of equipment during September or October or by a maintenance schedule provided by the Contract Manager or their designee. Testing and adjusting of the equipment will be performed on-site. On a semi-annual basis for the total term of the Contract, the Contractor shall conduct all checks as required by the manufacturer's operating documents or per the Department's request. Documentation of services shall be provided to the Department's Contract Manager within 30 days of completion. The Contractor shall perform the following services on all equipment, systems, or components:

2.2.1 Test each generator for at least one-half (1/2) hour under no load for quarterly inspections

2.2.2 Lubricating System

- Check lube oil level and add oil as necessary
- Inspect for oil leaks, and check and re-torque connections to manufacturer's specifications
- Check governor oil level and add oil as necessary (where applicable)
- Check condition of lube oil hoses and connections
- Check oil base heater and adjust if necessary
- Check injection pump oil level and add oil if necessary (where applicable)
- Check engine breather, and clean and remove any oil residue, dust, dirt, or other restriction
- Start engine, check oil pressure, and adjust if necessary, to manufacturer's specifications
- Check engine oil stick for water or residue
- Check turbo-charger for oil leaks (where applicable)
- Check front and rear crank shaft seals for oil leaks
- Check equipment hour meter for hours of operation; refer to manufacturer's operation and service manual; if hours of operation are near or exceed manufacturer's stipulated time for oil service, change oil and filter with

manufacturer's approved oil and filter; start engine and check for oil leaks at the filter; check oil stick for proper oil level
- Take oil sample; send to laboratory for analysis; provide a copy of the report to the Contract Manager and Facility Manager within thirty (30) days from the service date.

2.2.3 Fuel Delivery System

- Inspect fuel lines, hoses, connections, clamps, injectors/carburetors, injector pumps, and priming pump, etc. for leaks, and correct as needed
- Check operation of day tank (where applicable)
- Drain water from fuel traps (where applicable)
- Drain water from day strainer (where applicable)
- Clean sediment bowl (where applicable)
- Check for water in fuel
- Inspect fuel filter and change filter as necessary
- Check fuel pressure ensuring compliance with manufacturer's specifications

2.2.4 Cooling System

- Check for leaks
- Check coolant level adding if necessary
- Check coolant pH, add long-life anti-freeze and replace as necessary
- Check all belts for cracks or wear and replace as necessary
- Check all belts for proper tension and adjust as necessary
- Check condition of water hoses and clamps
- Check for leakage and repair leaks
- Check water, filter, and replace water filter elements annually or as needed, whichever is sooner
- Pressure test radiator and cap
- Check water pump for leaks and bearing noise
- Verify the temperature gauge is reading the correct temperature using infrared device
- Check operation of engine heater and switch
- Check fan and radiator for physical damage, obstruction & leaks
- Drain and replace anti-freeze, when required
  NOTE: All belts and hoses shall be replaced every five years, regardless of condition.

2.2.5 Air Systems

- Check air cleaner (dry type)
- Check turbocharger clearance (where applicable)
- Check and service oil bath air cleaner as needed (where applicable)
- Check air hoses and connections (where applicable)

2.2.6 Electrical System

- Check battery fluid and correct if necessary
- Check battery specific gravity and correct if necessary
- Check battery trickle charger and record rate
- Check battery connections and clean and tighten if necessary
- Lubricate generator, starter/cranking
- Check air compressor, if not electric start

- Check for loose load line connections and emergency supply line connections
  NOTE: The Contractor shall replace all batteries every three (3) years, regardless of condition.

2.2.7 Exhaust System

- Inspect the entire exhaust system
- Check rain cap for leaks
- Inspect the manifold connection for leaks and re-torque as necessary

2.2.8 Engine Safety Controls

- Check operations of all safety controls and emergency stops

2.2.9 Engine Test - No Load

- Start engine and check operation and adjust RPM if necessary
- Observe oil pressure and record

2.2.10 Ignition System

- Inspect all wires
- Check ammeter for discharging while cranking
- Check ammeter for full charge at start-up

2.2.11 Generator Sets

- Check slip rings
- Check commutator
- Check brushes to assure they are free
- Inspect generator wiring for fraying
- Check and record each phase volts, amps, and frequency, and check operation of transfer switch
- Check automatic start-up
- Check generator grounding
- Adjust voltage regulator
- Check generator windings and armature for cleanliness
- Check excitor belts for fraying or cracking
- Check excitor and regulator for cleanliness
- Check generator mounting bolts for tightness and re-torque as required
- Lubricate generator bearings, drive, and joints
- Inspect for potential hazards resulting from vibration and/or pressure
- Check for alternator vibration
- Inspect and torque (if necessary) all main supply, emergency supply and load line connections
- Verify phase relay drop out and pickup points, adjust if necessary

2.2.12 Transfer Switch

- Check all wiring
- Inspect to assure all supply and load lines are tight
- Check for proper mechanical operation of the transfer mechanism
- Note settings on timers and assure they are proper for the application
- Verify phase relays drop out and pick up points, traditionally drop out at 70% and pick up at 90% of rated voltage, and adjust if necessary
- Attach calibration tag with date and calibration of relays noted

- Advise the contract manager as to any options they might want to add or change

2.2.13 Engine

- Check for engine noises
- Check carburetor/injectors for proper adjustments and operation, and correct as necessary
- Check choke adjustment (where applicable)
- Check engine for excessive smoke
- Check for air in the induction system
- Check cylinder head and head gasket
- Check for excessive blow by
- Check turbocharger for noise
- Check prelube pump for proper operation
- Check engine high idle speed and correct if necessary
- Check engine low idle speed and correct if necessary
- Check emergency shutoff for proper operation
- Check engine for proper operation at rated speed
- Inspect engine mounting bolts, tightening bolts if loose and replace bolts if broken
- Check engine wiring harness for breaks or wear, repairing wiring harness if broken and repairing or re-routing harness if worn and to prevent wear

2.2.14 Testing

(While engine is running under actual connected load such as during Loadbank test, adjust voltage and frequency)

- Adjust clock exerciser as necessary
- Test delay start
- Test delay pick-up
- Test delay retransfer
- Test delay cool down
- Test delay transition
- Test delay preheat
- Calibrate undervoltage sensors
- Calibrate overvoltage sensor
- Calibrate generator sensors
- Record load per leg
- Record voltage per leg
- Record frequency
- Record oil pressure
- Record water temperature
- Check battery charging system
- Clean up work area

2.3 General Maintenance Responsibilities

2.3.1 The Contractor shall correct all deficiencies that are discovered during the semi-annual and annual maintenance service visits described above and as directed by the Facility Manager or Contract Manager. The Contractor is required to provide to the Facility Manager a written estimate of any labor and parts costs required to maintain the engine or generator in proper working order.

2.3.2 The Contractor shall be responsible for removal and disposal of all oil and filters and shall comply with all Federal, State, and local regulations for disposal of hazardous materials.

2.3.3 Department personnel will perform a weekly inspection. This inspection will be to check oil, coolant, fuel, batteries, gauges, belts, oil pressure, engine temperature, etc. Liquids will be topped off with Contractor provided supplies. All major problems will be promptly reported to the Contractor who shall take appropriate action based upon Section 2.4, Repair and Response Time as delineated below.

2.3.4 The Contractor shall be available and present for all elevator testing which requires the Contractor to be on-site.

2.3.5 The Contractor shall test the fuel located in each fuel tank annually to ensure cleanliness of fuel.

2.3.6 The Contractor shall clean each fuel tank every three (3) years upon execution of the Contract.

2.4 Repair and Response Time

2.4.1 The Contractor shall provide a written estimate to the Facility Manager of any needed repairs or replacement parts to keep the generator or fire-pump in proper working order. The Contractor will provide as accurate an estimate as possible of time for those repairs to be completed.

2.4.2 Response time for emergency repairs shall require that a technician be on-site within two (2) hours from time of notification to the Contractor by the Department. In the event the Contractor fails to meet this requirement, a second independent contractor may be called in to perform this function and the cost of this service (including parts) will be deducted from the original Contractor's price.

2.4.3 Response time for non-emergency repairs shall be within twenty-four (24) hours from time of notification to the Contractor by the Department. In the event the Contractor fails to meet this requirement, a second independent contractor will be called in to perform this function and the cost of this service (including parts) will be deducted from the original Contractor's price.

2.4.4 In the event an emergency repair cannot be completed within eight (8) hours of response by the Contractor, a portable generator unit shall be supplied by the Contractor and connected by the Contractor coordinating with the Facility Manager. All temporary, portable units shall be fully operational and of equitable service capability. The Contractor will be responsible for handling and coordinating the hook up, disconnect, pick-up and delivery of temporary portable units to the facility site.

2.4.5 Travel time and/or mileage to and from a job site shall be non-billable.

2.5 Warranted Equipment

The original warranty supplier shall provide all new equipment warranty work. All warranty responsibility for previously purchased equipment will continue to be provided by the original warranty supplier until expiration of the warranty period. Upon expiration of the warranty period, responsibility for maintenance and repairs shall automatically transfer to the Contractor, unless otherwise directed by the Department's Contract Manager. All

trouble calls shall be initially reported to the Contractor. If the trouble call involves a warranty item, the Contractor shall notify the Department's Contract Manager, who will then have the responsibility of placing and tracking the warranty trouble call with the warranty supplier. Maintenance of the warranty inventory list and the notification of a warranty trouble call to the Department shall be provided by the Contractor at no additional cost to the Department.

2.6 Replacement Parts

The cost of replacement parts not included in this Contract shall be in accordance with the following:

2.6.1 Cost shall not exceed current manufacturer's price, regardless of the reason for the replacement;

2.6.2 Cost shall not exceed the cost for replacing the entire unit;

2.6.3 Cost shall be the lesser of:

- the Contractor's standard government discounted price;
- the price available to the Department on a State of Florida contract;
- a special sales price offering; or
- the lowest price given to any Customer.

2.6.4 Replacement parts must be genuine original manufacturer's parts, unless approved by the Department, and must be either new or like new refurbished parts. Replaced (old) parts shall become the property of the Contractor. New and refurbished replacement parts shall become the property of the Department. Only parts approved by the original manufacturer for the specific device being serviced shall be used when replacement parts are required.

2.7 Contractor's General Requirements

2.7.1 Inventory of Equipment

The Contractor shall maintain the inventory when performing scheduled maintenance of all equipment. Anytime the inventoried equipment changes through additions, or deletions, the Contractor will modify its records to indicate such action and maintain an accurate equipment inventory. All changes to the inventory shall be communicated in writing to the Contract Manager. The inventory shall include, at a minimum, the following:

- make, model and location of each piece of equipment;
- any existing manufacturer's warranties on equipment added, if applicable;
- notation of any changes since the last monthly report; and
- type of service.

Under no circumstances shall the Contractor remove any equipment owned by the Department. The Contractor shall request that, when replacing equipment, the property sticker, if applicable, be removed by an appropriate Department staff member authorized to adjust equipment inventory records.

NOTE: All equipment specified in Attachment C, Facility List, is currently operational. Any additional equipment acquired by the Department shall be added to the Contractor's equipment inventory as specified in Section 5, Additions and Deletions.

2.7.2 Staffing Requirements

The Contractor shall ensure that it has sufficient personnel to provide the services outlined in this RFP. All technicians provided to perform services shall have factory training certifications related to equipment being serviced with documentation provided to the Contract Manager.

The Contractor shall also have a verifiable in-house training program for its personnel on emergency power generator service to include diesel and electrical training as well as continuing educational training on emergency power generation units and diesel engines.

Subcontractors are not allowable under this Contract.

2.8 Records and Documentation

The Contractor shall maintain and update generator systems maintenance records for each type of equipment serviced. Such documentation shall include, but shall not be limited to, records of all service calls, preventative maintenance performed, and any system modifications if applicable. The Contractor shall maintain a service log at the site in a binder approved by the Contract Manager for each piece of equipment maintained.

2.9 Semi-Annual and Annual Reporting Requirements

The Contractor shall submit a summary report of all services performed both semi-annually and annually during the Contract year. The report shall be broken down by date of service and equipment and shall provide an itemized list of all services provided for each piece of equipment in that Region. The report shall be provided to the Contract Manager no later than thirty (30) days following the end of every semi-annual and annual service. The report shall also summarize and state results of annual maintenance, repairs and replacements that were made. Contents and format of the report shall be subject to change upon written notice from the Contract Manager. At a minimum, reports should include the invoice, inspection reports, results and loadbank test annually.

2.10 Department Responsibilities

2.10.1 Perform weekly inspections as defined by the Contractor.

2.10.2 Notify the Contractor promptly of any operation irregularities or defects.

2.10.3 Use fuel that meets specifications defined by the manufacturer.

SECTION 3. PERFORMANCE MEASURES

SEE ATTACHMENT – E – PERFORMANCE STANDARDS AND GUARANTEES

SECTION 4. FINANCIAL CONSEQUENCES FOR NONPERFORMANCE

In addition to the specific consequences explained in Attachment E, Performance Standards and Guarantees, the State reserves the right to withhold payment or implement other appropriate remedies, such as contract termination or non-renewal, when the Contractor has failed to perform and comply with provisions of this Contract. These consequences for non-performance shall not be considered penalties.

SECTION 5. ADDITIONS / DELETIONS

During the term of the Contract, the Department shall have the right to add and/or delete equipment or facilities covered by this Contract as it deems appropriate with advance written notice to the Contractor. Deletions shall result in a price reduction equal to the amount set forth in the Contract pricing. The addition and/or deletion of other facilities shall be upon written mutual agreement of both Parties through a Contract amendment.