



February 3, 2011

Addendum # 4

ITB-11-01

The Invitation to Bid, ITB-11-01, Two-Year Contract-Generator Maintenance, is hereby amended by the following:

The GENERATOR MAINTENANCE SPECIFICATIONS are revised by the following:

1. "Comparable experience will be considered." Is added to the end of the first paragraph.
2. The word "annually" is deleted from the section titled LOAD BANK TESTING.

Revised specifications pages 1A – 3A are included with the addendum.

All other terms and conditions remain the same.

Sincerely,

CITY OF WINTER HAVEN

A handwritten signature in black ink, appearing to read 'Bob Bishop', written over a horizontal line.

Bob Bishop

Procurement Services Division Director

GENERATOR MAINTENANCE SPECIFICATIONS

This is an annual maintenance contract for a total of thirty six (36) generators located within the City of Winter Haven Utility Service Area. Thirty of the generators are located on wastewater lift stations. The remaining six are located at water treatment plants. Bidder must have at least three (3) years experience as a certified service technician for Tradewinds, Cutler Hammer, Katolight and Onan/Cummins generators. Comparable experience will be considered.

The following LEVEL ONE services are required to be performed annually at each generator:

VISUAL INSPECTION CHECKS

- Oil Level
- Coolant Level and pH
- Air Cleaner Assembly (leaks, cracks)
- Inlet Manifold and Piping, Rain Cap (condition)
- Exhaust Manifold and Piping (condition)
- Fuel System (day tank operation – lines, leaks, condition)
- Fuel Priming Pump (operation, condition)
- Radiator, Radiator Cap, Radiator Air Flow (leaks, damage, blocking)
- Water Hoses (condition, leaks)
- Fan Assembly (cracks, bent blades, bearings)
- Vee Belts, Balancer (proper tension, condition)
- Crankcase Breather
- Engine Mounts (condition)
- Electrical Wiring (engine)
- Battery(s)
- Battery Charger (log output voltage)
- Overall Appearance (paint, etc.)
- Generator Stator – Armature (visual condition)
- Brushes, Holders, Slip Rings (condition)
- Rotating Fields (condition)
- Controller (fault indicators)

PERFORMANCE EVALUATIONS

- Starter (cranking ability, operation) voltage drop
- Engine Smoke (critical system indicator)
- Gauges and Indicators (operation, condition)
- Battery charge Rate (voltage reading, amps reading)
- Fuel Transfer Pump (PSI, valves, condition, leaks)
- Lubrication System (leaks)
- Lubrication System (PSI valve) at High Idle
- Cooling System, Block Heater (s) (leaks, condition)
- Temperature Regulators (operation)
- Governor (operation, stability, response)
- Turbocharger (operation)

- After Cooler (condition, leaks)
- Safety Devices (operation, condition) (faults?)
- Oil Pressure
 - Water Temperature
 - Overspeed
 - Overcrank
 - Water Level
 - Others
- Control Panel (operation, condition) (faults?)
- Electric Power Generator (operation)
 - Voltage
 - Amperage
 - Hertz

All results shall be logged on a generator preventative maintenance checklist and will be turned in for each generator along with invoice submittal. Any problems observed and/or any readings that are outside of normal operating parameters must be noted.

The following LEVEL TWO services are required to be performed annually at each generator:

- Change Oil and Filters
- Change Fuel Filters
- Change Air Filters
- Sample Engine Oil for Engine Wear and Contaminants
- Service Batteries
- Inspect and Lubricate Generator Bearings
- Inspect and Lubricate Airflow Louvers
- Clean Dust and Dirt from Unit and Unit Housing
- Oil Sampling (performed by atomic spectrophotometry and shall be accurate within a fraction of one part per million of the following elements)
 - Iron
 - Chromium
 - Copper
 - Aluminum
 - Silicon
 - Water and fuel dilution

Immediate notification shall be provided to the City when analysis shows results of a critical reading.

The following LEVEL THREE services are required to be performed, as needed, at the City's instruction, at each generator:

- Load Bank Test
- Megohmometer Test

EMERGENCY REPAIR SERVICES

These services will be determined on an as needed basis. Selected vendor will submit recommended services to City, in writing. City will direct selected vendor to schedule repairs and services accordingly. As needed services include, but are not limited to:

- Engine Valve Adjustments

- Coolant System Flush
- Megger Testing of Generator Sets
- Load Bank Testing of Generator Sets
- Emergency Repairs

LOAD BANK TESTING

Load bank testing shall be done in the presence of the City's representative. Testing shall be for a minimum of four hours under full load.

The awarded contract will be for a term of two (2) years with an option of four renewals.