

**LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
SPECIFICATIONS**

**PREVENTIVE MAINTENANCE OF
EMERGENCY GENERATOR POWER SYSTEMS**

SCOPE OF WORK

Contractor to perform all scheduled services for the Emergency Generator Power Systems installed throughout the Department of Transportation and Development Headquarters complex located at 1201 Capitol Access Road, Baton Rouge, Louisiana. Services shall include, for each generator noted below, annual inspection and preventative maintenance service, two (2) semi-annual inspections and two (2) preventive maintenance services, and emergency services, as needed, on a twenty-four (24) hours, seven (7) days a week basis.

LADOTD Location Descriptions	Manufacturer	Model Number	Serial Number
Headquarters Building	Onan	150DGFA	G960610285
East Wing	Caterpillar	5R4	6FAO4922
Permits	Generac	6285570100	2087005
Annex Building	Cummins 200KW, 3 Phase	Power Model DFEH5811071	3100160082
Car Wash	Generac	0052430	4474455

MAINTENANCE SCHEDULE

All annual inspections and preventive maintenance shall be performed each year in **January** or **July** as scheduled by the DOTD Facilities Maintenance Manager or their designee. The two (2) semi-annual inspections and two (2) semi-annual preventive maintenance procedures on each generator during the months of **January** and **July**.

Annual and semi-annual inspections, maintenance, and preventative maintenance shall be scheduled by the DOTD Facilities Maintenance Manager and must be performed during regular business hours, Monday through Friday, 8:00 AM – 4:30 PM.

Contractor shall contact the DOTD Facility Maintenance Manager at (225) 379-1127, the DOTD Assistant Maintenance Manager at (225) 379-1024 or their designee at least twenty-four (24) hours in advance of arrival. Upon arrival, the Contractor and/or service technician(s) shall report to the Boiler Room located on the first floor of the DOTD headquarters building, Room 110A to notify DOTD Maintenance of their arrival and obtain a vendor pass. Service cannot begin until the Contractor has notified Building Maintenance of arrival, which generator(s) will be serviced

during the call, and a vendor pass(es) has been acquired. At the end of the day, the Contractor and/or the technician(s) are to return the pass/passes provided and submit the report summarizing the work completed that day. The Contractor and/or technicians must sign in and out on each day of service.

Annual Inspection and Preventative Maintenance Requirements

- I. Batteries
 - a. Replace ALL batteries with new equivalent batteries on the first annual inspection as scheduled by the Facilities Maintenance Manager.
- II. Fuel
 - a. Replace the following:
 1. Day tank filter
 2. Fuel filter
 3. Fuel Elements
- III. Oil
 - a. Change lube oil
 - b. Change all filters
- IV. Clean
 - a. Engine crankcase breather
 - b. Primary fuel filter screen
 - c. Generators inside and out
- V. Air Cleaner and Air Induction System
 - a. Check the air cleaner elements and air induction system for any foreign material, remove unwanted foreign materials
 - b. Replace air filter elements as needed
- VI. Turbo Charger
 - a. Check for end play and leaks
 - b. Adjust or repair as needed
- VII. Coolant
 - a. Flush coolant and replace with proper coolant mixture with inhibitors, per manufacturer guidelines
 - b. After coolant is replaced, warm-up system and check for proper coolant inhibitor strength and proper antifreeze protection
 - c. Change all hoses and belts
- VIII. Transfer Switches and Generator Bearings
 - a. Check all transfer switches with an infrared light for heat expansion of terminals
 - b. Lubricate all transfer switches and generator bearings
- IX. Doors and Cabinet Latches
 - a. Oil and check for proper operation
- X. Load Bank Test
 - a. Perform a four (4) hour load bank test at 25%, 50%, and 80%.
 - b. Load bank test to be scheduled by Facilities Maintenance Manager and must be performed during the Annual Inspection and Preventative Maintenance.

Semi-Annual Inspections & Preventive Maintenance Requirements

- I. Cooling System
 - a. Clean the radiator core for proper air flow and repair as needed
 - b. Check and replace as needed:
 - i. Coolant inhibitor strength
 - ii. Coolant level
 - iii. Radiator cap and seal
 - c. Check for corrosion and leaks, repair as needed
 - d. Check the condition of all coolant hoses and clamps, replace as needed
- II. Fuel System
 - a. Check for leaks and the proper operation of the day tank and transfer pumps, repair as needed
 - b. Drain water and sediment from the day tank
 - c. Check the condition of the flex fuel lines, replace as needed
- III. Batteries
 - a. Check:
 - i. Cable and connections
 - ii. Specific gravity and electrolyte levels
 - iii. Batter voltage
 - iv. For proper operation
 - b. Replace any defective batteries, as needed
- IV. Terminal Strip Connections
 - a. Tighten and/or repair all
- V. Control Panel Relays and Connections
 - a. Tighten and/or repair all
- VI. Governor Linkage
 - a. Check for proper operation
 - b. Adjust and/or tighten as needed
- VII. Check the following and repair as needed
 - a. Lube oil level, add fluid as necessary
 - b. Fan belt(s), adjust tension and/or replace
 - c. Exhaust system, including flex couplings and rain flashing
 - d. Air cleaner elements including cleaner seals and indicators
 - e. Water jacket heater and heater control circuit
 - f. Generator air gap and the generator leads insulation
 - g. Collector rings and brushes
 - h. Nuts and bolts for excess noise and vibration, tighten as necessary
 - i. Crank termination time, cranking voltage drop, and engine instruments
 - j. Remote fan motors and pumps
 - k. Louver operation
 - l. Safety shut-down voltage drop across the automatic transfer switch contacts
- VIII. Tests and Reports
 - a. Contractor to collect samples of the following and send to an independent testing lab for analysis per the manufacturer's requirements.
 - i. Crankcase oil
 - ii. Fuel
 - iii. Radiator coolant

- b. Report of analysis should be submitted to the Facility Maintenance Manager within seven (7) days of sampling. Contractor must contract the Facility Maintenance Manager if additional time is needed for the report to be processed.

EMERGENCY SERVICES

Emergency services shall be provided by the Contractor on an as needed basis, twenty-four (24) hours a day, seven (7) days a week for parts and labor for all generators noted herein. Emergency callout response times shall not exceed twenty-four (24) hours unless approved by the DOTD Facility Maintenance Manager, the DOTD Assistant Maintenance Manager or their designee. If approval is given, the Contractor must respond at the date and time provided by the DOTD approver.

A monitored 1-800 toll free number shall be provided to DOTD Building Maintenance for after-hours and weekend emergency callouts.

In the event of an emergency callout, the Contractor shall supply DOTD Building Maintenance with a report that states the date and time of arrival and departure from the premises, the technicians name, the name of the DOTD representative that made the request, the generator that was worked on, the symptoms that caused the callout, what actions were taken to remedy the situation.

REPAIR PARTS AND MATERIALS

Contractor shall furnish all materials, parts and labor necessary to replace and/or repair the generators noted within this specification. All parts shall be original equipment manufacturer (OEM) parts; aftermarket products/parts will not be accepted. Contractor is responsible for the proper disposal of all used materials and/or parts, including but not limited to fluids, oils, etc.

Contractor shall have access to major repair parts within a twenty-four (24) hours. If additional time is needed, excess time should not exceed thirty-six (36) hours. DOTD Building Maintenance must be notified of any delays in repairs due to the inability to locate supplies.

CONTRACTOR REQUIREMENTS

Licensing

Contractor shall be licensed to perform the specified services in the City of Baton Rouge, the Parish of East Baton Rouge and the State of Louisiana. A copy of each license may be required prior to award.

DOTD BUILDING MAINTENANCE CONTACTS

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