



WEYBURN FIRE DEPARTMENT

Emergency Power System Requirements

Emergency Power Systems <i>CSA C282 – Emergency Electrical Power Supply for Buildings</i>	Responsibility
Maintain records of tests and inspections on site	
A quantity of fuel sufficient for operating the engine under maximum load for at least 2 hours shall be maintained on-site. (24 hours for care or detention occupancies)	
Manuals containing mechanical and electrical drawings and instructions for operation and maintenance shall be kept available for use by staff.	
The emergency power supply equipment shall be operated and maintained per the manufacturer’s instructions to ensure continued reliable operation.	
Provide instructions for starting and switching generators.	
A logbook of inspections and maintenance performed shall be maintained on-site.	
Weekly	
Emergency power systems for healthcare facilities shall be tested .	
<p>Inspections and tests shall be performed as specified in Table 2, CSA C282, including the following:</p> <ul style="list-style-type: none"> - fuel tank level - lubricating oil level - engine coolant - heaters, lubricant and/or coolant - engine, generator, fuel tanks and cooling systems for evidence of leakage - operation of fuel transfer pump - starting system batteries, etc., for leakage, cleanliness, and terminal security - air tanks for pressure (air motor system) - valves for leakage (air motor system) - operation of auxiliary engine and compressor (air motor system) - bleed off condensation (air motor system) - louvre settings-control panel settings (ensure the unit is ready for start-up) - battery electrolyte level - battery-specific gravity - battery electrical connections (tightness, leaks or sulfation) - battery cleanliness and dryness between terminal posts - charger cleanliness and operation of both float and equalize modes - engine governor control linkages and oil level - engine fuel pump oil sump - engine fan belts and protective devices - panel covers are secure and annunciator lamps are operational 	

Monthly	
Emergency power systems shall be tested .	
The emergency electrical power shall be thoroughly tested monthly as follows:	
a) Simulate a failure of the normal power supply. b) Arrange so that: <ul style="list-style-type: none"> i) an engine generator set operates under at least 30% of the rated load for 60 minutes and; ii) all automatic transfer switches are operated under load. c) Include an inspection for the correct function of all auxiliary equipment, such as radiator shutter control, coolant pumps, fuel transfer pumps, oil coolers and engine room ventilation controls. d) Record all instrument readings associated with the prime mover and generator and verification that they are normal. e) Log and report as further prescribed in the instruction manual for operation and maintenance. f) Check fuel supply for sufficient quantity.	
Semi-Annually	
Check/Clean the following: <ul style="list-style-type: none"> • Crankcase breathers • Lubricate governor • linkages 	
Annually	
Test the generator, control panel, and transfer switch in conformance with CSA C282, "Emergency Electrical Power	
Emergency power systems shall have a 2-hour full-load test .	
The liquid fuel storage tank shall be drained and refilled with a fresh fuel supply at intervals not greater than 12 months.	
2 Year Checks	
The contractor shall perform checking, testing , and servicing of items which require attention at 2-year intervals as specified in the manufacturer's instructions and CSA Standard C282.	
3 Year Checks	
The contractor shall perform checking, testing , and servicing of items which require attention at 3-year intervals as specified in the manufacturer's instructions and CSA Standard C282.	
5 Year Checks	
The contractor shall perform checking, testing , and servicing of items which require attention at 5-year intervals as specified in the manufacturer's instructions and CSA Standard C282.	

